Service Manual
Model S 962-2

VÖLKER

Help

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Version, Imprint, Type label

Service Manual S33
Version 1.01 (09.08.2012)
for Völker Bed Model S 962-2
from year of construction May 2009

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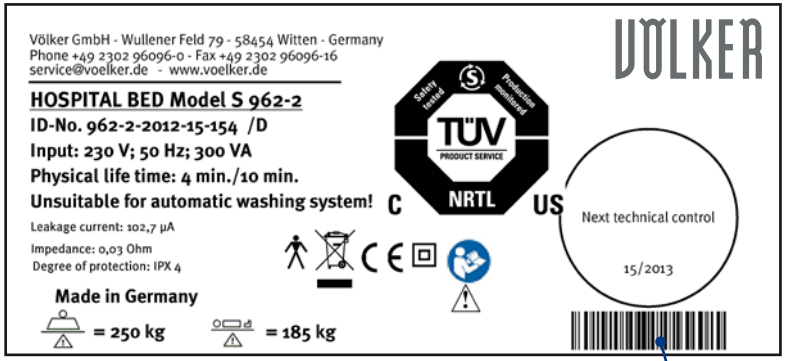
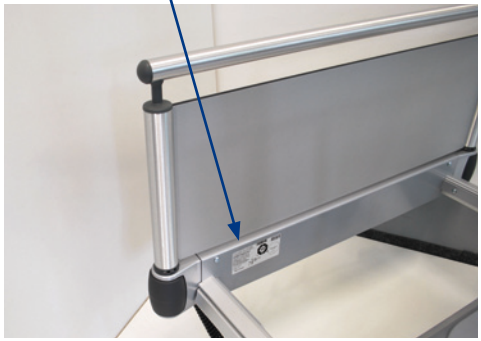
Type label



The type label is located on the inside of the head panel.

Raise the back section to read the type label.

For further information on the type label, see Appendix 🕮 162.



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Notes

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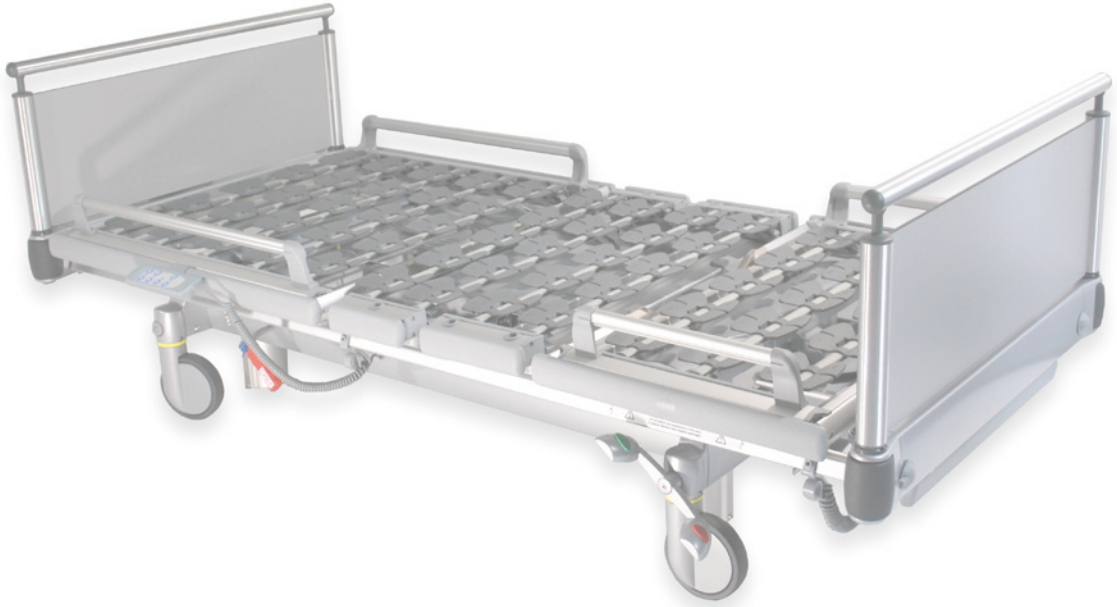

General notes

You have purchased a bed from Völker AG. This bed has been built in accordance with the applicable national and international standards and the regulations reflecting the current state of technology.

Völker beds satisfy requirements in terms of safety and functionality. They are tested in accordance with international standards and bear the CE mark, which documents the beds' compliance with essential requirements for medical products.

However, please read the fundamental safety provisions (see also instructions for use). Please also note (with particular attention to any warranty claims) the further notes on the following pages.

This service manual is intended to give service technicians relevant information and ensure they work correctly.

Every person involved with maintenance or servicing must at least

- have taken part in service training by Völker,
- have read the safety notes and
- the service manual

and be qualified in accordance with MPBetreibV sections 4 and 6.

To avoid errors and ensure that our beds work properly, these documents must always be accessible to service personnel. (Please also refer to page 142 in regard to staff training).

Copyright protection

This service manual may only be transferred to third parties with the written consent of Völker GmbH. All documents are protected under copyright.

Warranty and liability

Völker GmbH is liable for any faults or failures, not including further claims arising in the context of the warranty obligations detailed in the main agreement. Claims for compensation, for whatever legal reason such claims may be raised, will not be entertained.

We reserve the right to make technical modifications without notice as part of the further development of the beds which form the subject of this service manual. All specifications are non binding. Printing errors excepted.

We accept no liability for damage and operational faults caused as a result of misuse and/or non-observance of this service manual.

The portrayal of the accessories does not necessarily match the actual product.

Warning symbols
Information marked with this symbol must always be read and strictly observed!

DANGER represents an immediate threat of danger that can cause serious physical injury or death.

WARNING represents potentially dangerous situations that can lead to serious physical injury or death.

CAUTION represents potentially dangerous situations that can cause slight physical injuries.

NOTE warns of potential damage to objects or property.

Before commencing maintenance work

The service manual must be read in full by the person responsible for carrying out the servicing before starting the work.

Before commencing maintenance or repair work, the personnel responsible must be familiarised in detail with how to handle the bed and their attention must be drawn to the individual hazards described in this manual during assembly and disassembly of the bed's components.

The bed is not protected against explosion and must therefore only be serviced in an environment free from flammable substances and materials.

WARNING Before carrying out repair work, always pull out the mains plug and disconnect the bed from the battery pack by pressing the green reset button on the dual drive!

WARNING Maintenance and repair work should only be carried out after the bed has been disinfected.

WARNING Maintenance and repair work should only be carried out on an unoccupied bed. The patient may also have to be transferred to another bed before the work.

General regulations

The bed must only be operated and used in accordance with its designated purpose, in line with the conditions of the Medical Products Directive (MPG) and approved legislation pursuant to this, the generally-acknowledged rules of technology and the stipulations of occupational safety and accident protection guidelines. The bed may **not** be operated in a faulty state that could endanger the patient, care staff or third parties.

Before first activation

Before the bed is activated for the first time, care personnel must be instructed in the handling of the bed using the instructions for use. The potential dangers that can arise despite correct operation of the bed must also be pointed out in full.

Transporting the bed

⚠ **CAUTION** When moving the bed, it must always be ensured that the mains connection cable does not touch the ground.
The bed should only be moved on a solid floor. Never attempt to push it over obstacles of over 2 cm in height. The maximum angle of inclination of the floor must not exceed 10°.

Cleaning and disinfection

In order to maintain consistent functioning, the bed should be cleaned, disinfected and tested as soon as possible following each use, so that it can be reused immediately without risk.

Incorrect cleaning/disinfection of the bed can cause danger.

Maintenance and repair

Anyone responsible for carrying out maintenance and repair work must at least have received service training from Völker, have read the safety notes and the service manual and be qualified in accordance with MPBetreibV sections 4 and 6.

After maintenance work or repairs have been carried out, a technical check 🕮 145 must be carried out on the affected parts and/or functions. During this check, it must be determined that the bed can be used in accordance with the specifications without risk to patients, users or third parties.

The technical check 🕮 145 must be carried out at least once a year and after every lengthy period of non-use.

Any discernible damage, such as signs of wear and tear, loose screws or breaks/fractures must be eliminated immediately.

Electromagnetic and electrostatic faults

The beds in model series S 962-2 satisfy the EMC requirements in accordance with the law on medical products (MPG). The basis for testing is standard EN 60601-1-2.

Functional description

The features of the Völker care bed and its function are set out in the section **Functional description.**

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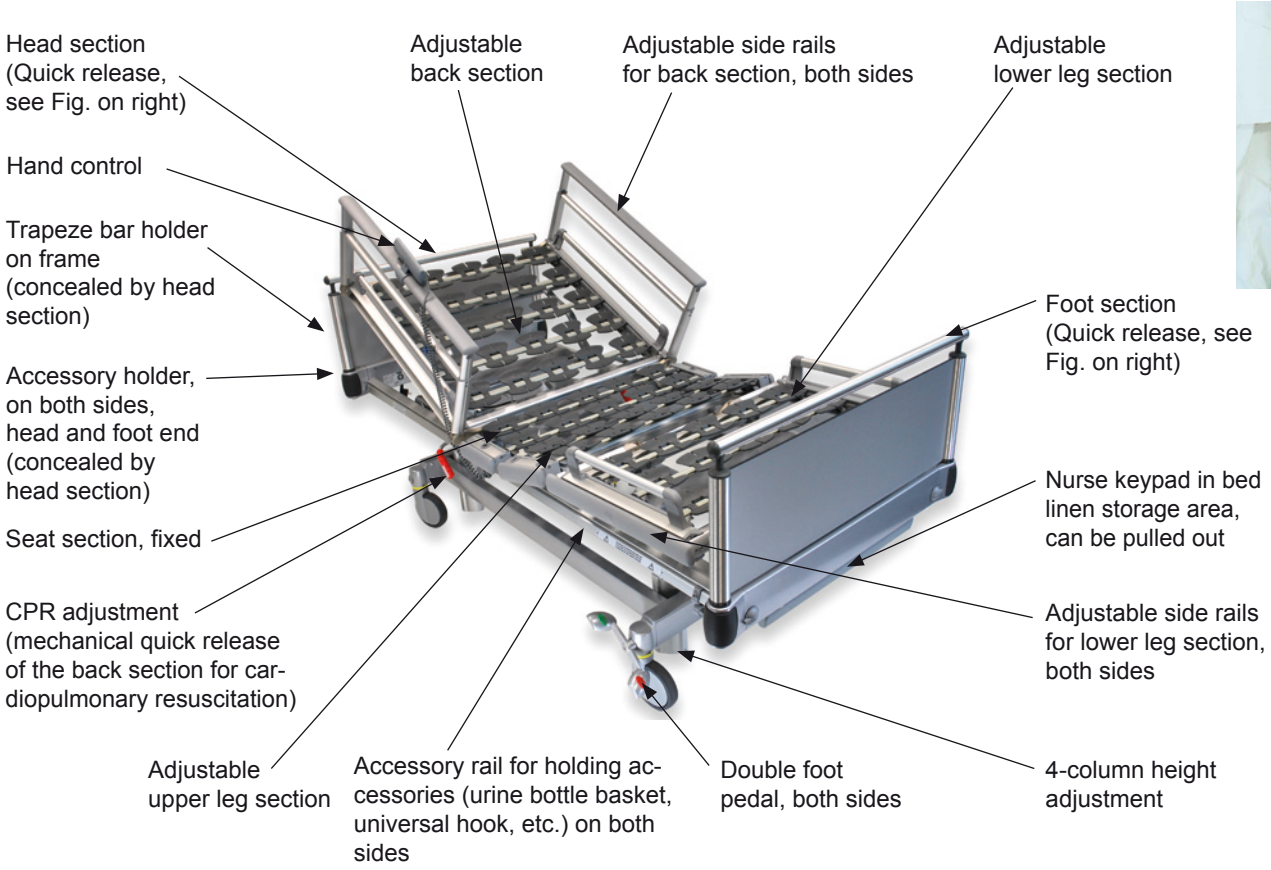
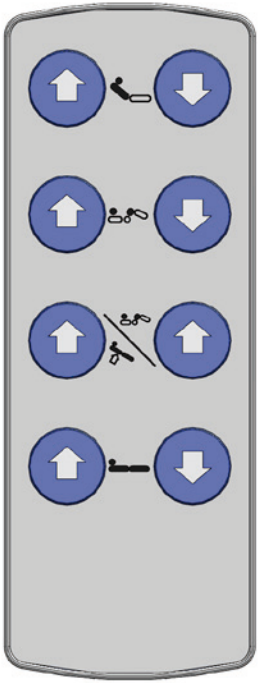

Head section (Quick release, see Fig. on right)
Adjustable back section
Adjustable side rails for back section, both sides
Adjustable lower leg section
Hand control
Trapeze bar holder on frame (concealed by head section)
Foot section (Quick release, see Fig. on right)
Accessory holder, on both sides, head and foot end (concealed by head section)
Nurse keypad in bed linen storage area, can be pulled out
Seat section, fixed
CPR adjustment (mechanical quick release of the back section for cardiopulmonary resuscitation)
Adjustable side rails for lower leg section, both sides
Adjustable upper leg section
Accessory rail for holding accessories (urine bottle basket, universal hook, etc.) on both sides
Double foot pedal, both sides
4-column height adjustment

Functional description | Hand control with hook 1/2



Back section up

Back section down

Upper leg section up

Upper leg section down

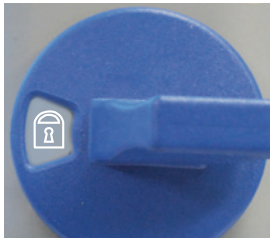
Anti-Trendelenburg positioning [1]

Auto-Contour [2] (optional)

Lying surface up

Lying surface down

Reverse:



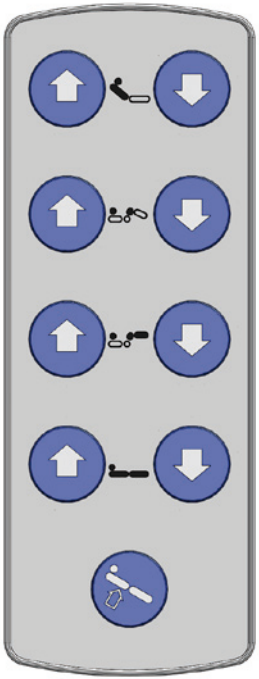
Hand control locked

Hand control unlocked

WARNING When actuating motorised adjustments with the side rails raised, it must be ensured that nobody has any contact with the side rails, and that no body parts are sticking through the side rails or are trapped between the lying surface and the lower frame and/or floor!

[1] Head end raised
[2] Back and upper leg section raised simultaneously

Functional description | Hand control with hook (option) 2/2



Back section up

Back section down

Upper leg section up

Upper leg section down

Lower leg section up

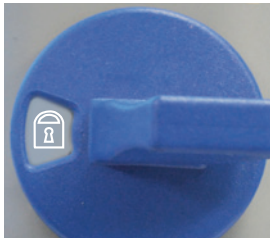
Lower leg section down

Lying surface up

Lying surface down

Anti-Trendelenburg positioning [1]

Reverse:



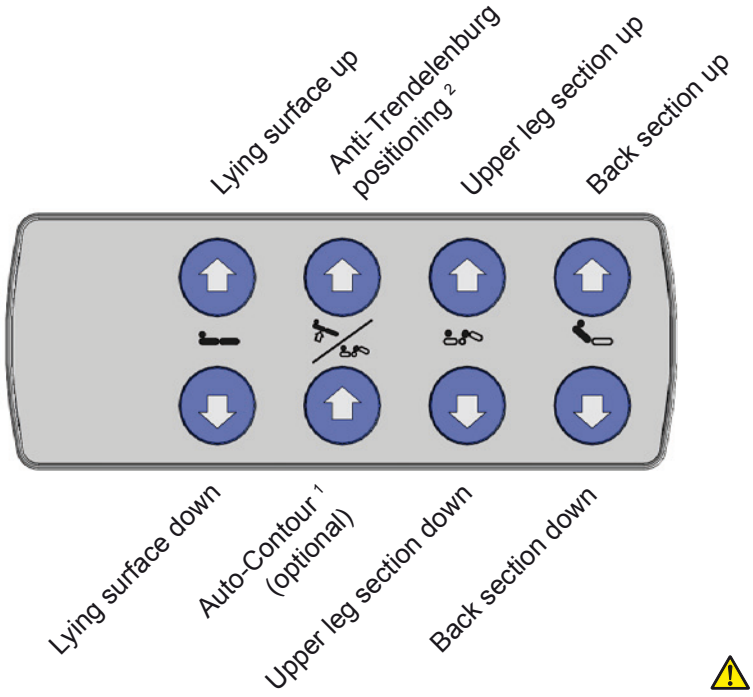
Hand control locked

Hand control unlocked

WARNING When actuating motorised adjustments with the side rails raised, it must be ensured that nobody has any contact with the side rails, and that no body parts are sticking through the side rails or are trapped between the lying surface and the lower frame and/or floor!

[1] Head end raised

Functional description | Transverse hand control (option) 1/2



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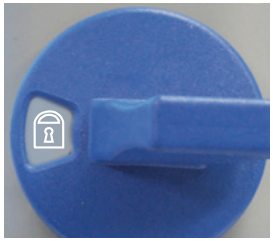


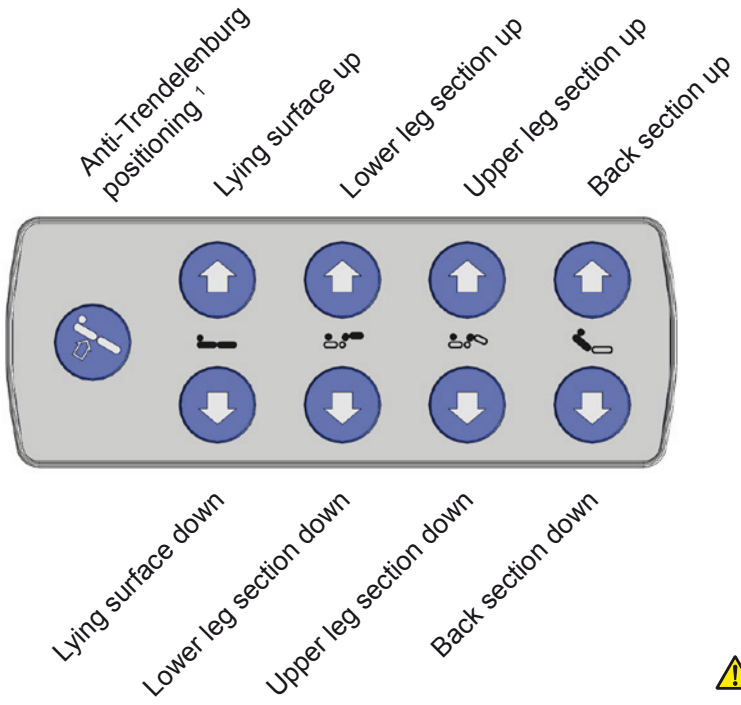
Hand control locked

Hand control unlocked

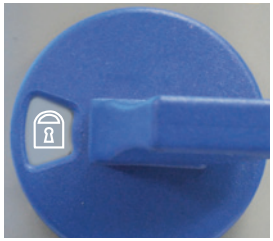
[1] Back and upper leg section raised simultaneously
[2] Head end raised

⚠ **WARNING** When actuating motorised adjustments with the side rails raised, it must be ensured that nobody has any contact with the side rails, and that no body parts are sticking through the side rails or are trapped between the lying surface and the lower frame and/or floor!

Functional description | Transverse hand control (option) 2/2



Reverse:



Hand control locked

Hand control unlocked

WARNING When actuating motorised adjustments with the side rails raised, it must be ensured that nobody has any contact with the side rails, and that no body parts are sticking through the side rails or are trapped between the lying surface and the lower frame and/or floor!

[1] Head end raised

NOTE Please note that to operate the bed, the nurse keypad must be switched on by pressing the on switch.
If no electric function can be activated, press the green reset button on the dual drive. Then press the green button on the mains isolation after 10 seconds in order to reactivate the bed.

Never press both green buttons at the same time.

NOTE The mains voltage is connected for the duration of the active time of the nurse keypad (120 sec.), so that the LED of the mains voltage display also lights up whenever the nurse keypad is active. If the keypad switches over to the inactive state, the mains power is switched off.

Double-click function

The nurse keypad can be equipped with an automatic function (double-click) on a country-by-country basis. Keys that can be assigned this function are marked with a double black arrow symbol .

With a double-click on the "Lying surface up" or "Lying surface down" button, for example, the lying surface moves to the highest or lowest position, respectively. This function can be stopped at any time by pressing any button (except the "ON" switch).

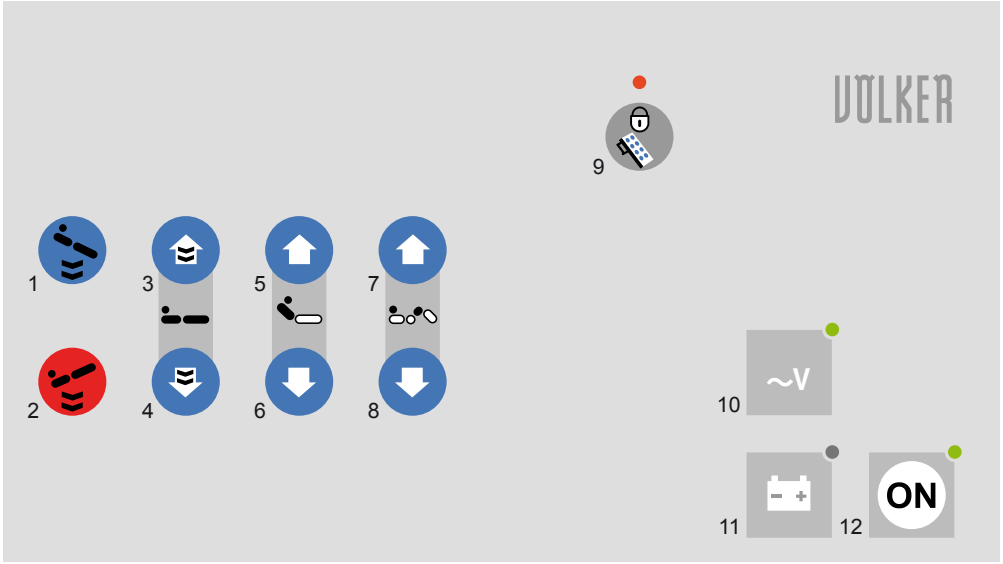
The automatic function can be deactivated by pressing the "Lock automatic function" key. If the function is locked, the LED above the key will light up red. If the double click function is permanently locked by at the factory, the LED will always light up red when the nurse keypad is switched on.

⚠ **DANGER "Risk of entrapment between the lower frame or floor and the bed frame when the bed is being lowered"**
It must be ensured that:
no people, limbs, pets,
bed linen or other objects are trapped between the bed frame and lower frame or floor during adjustment manoeuvres.

⚠ **CAUTION** The functions
- Automatic washing system position
- Manual washing
- Bed preparation

are purely service functions and may only be executed if the bed is unoccupied.

Functional description | Nurse keypad with complete lock 2/5

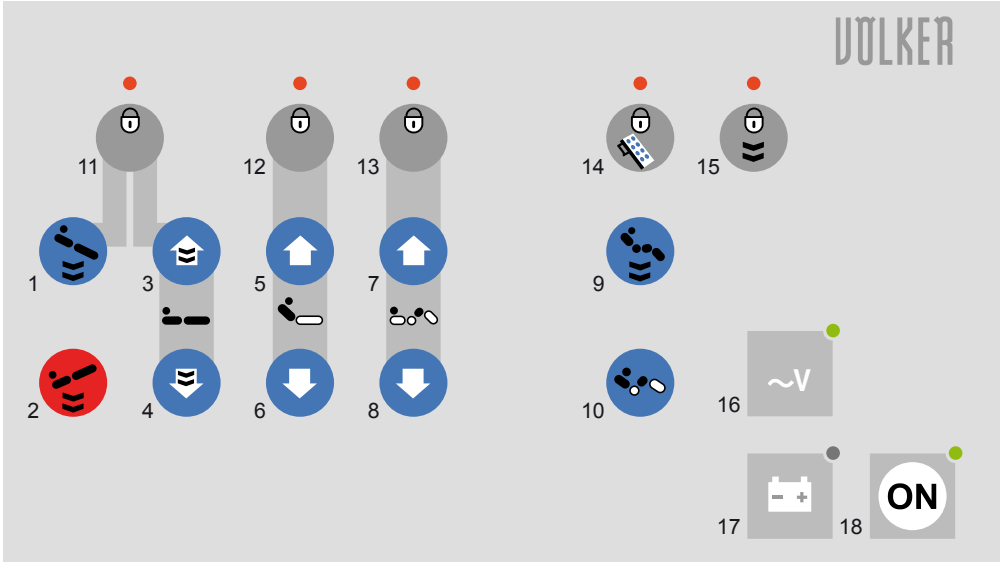


1 Anti-Trendelenburg positioning [1, 6]
2 Trendelenburg positioning [2, 6]
3 Lying surface up [6]
4 Lying surface down [6]
5 Back section up
6 Back section down
7 Upper leg section up
8 Upper leg section down
9 Lock hand control
10 Mains voltage display [3]
11 Battery display [4]
12 "ON" switch [5]

[1] Head end raised
[2] Head end lowered
[3] Green: mains voltage is on
[4] Green: >80% charged; yellow: 30-80% charged; red: discharged; flashing: charging
[5] After pressing the "ON" button, the keypad is available for up to 120 sec. after the last action, then it goes into stand-by mode
[6] Automatic function with double click possible on a country-by-country basis

⚠ **WARNING** When actuating motorised adjustments with the side rails raised, it must be ensured that nobody has any contact with the side rails, and that no body parts are sticking through the side rails or are trapped between the lying surface and the lower frame and/or floor!

Functional description | Nurse keypad with individual lock (option) 3/5

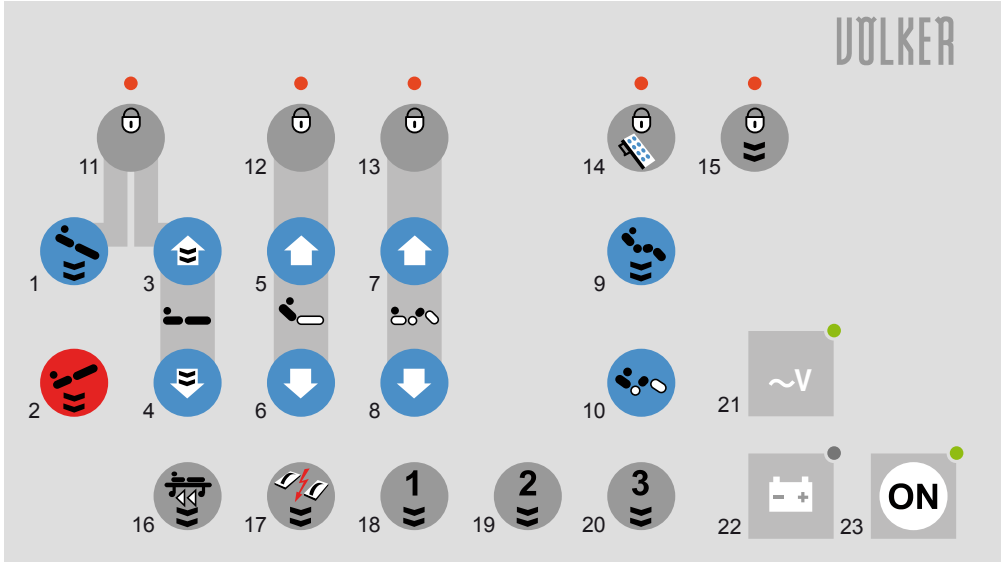


1 Anti-Trendelenburg positioning [1, 7]
2 Trendelenburg positioning [2, 7]
3 Lying surface up [7]
4 Lying surface down [7]
5 Back section up
6 Back section down
7 Upper leg section up
8 Upper leg section down
9 Cardiac chair position [7]
10 Auto-Contour [3]
11 Lock lying surface lift and Anti-Trendelenburg positioning
12 Lock back section
13 Lock upper leg section
14 Lock hand control
15 Lock automatic function
16 Mains voltage display [4]
17 Battery display [5]
18 "ON" switch [6]

[1] Head end raised
[2] Head end lowered
[3] Back and upper leg section raised simultaneously
[4] Green: mains voltage is on
[5] Green: >80% charged; yellow: 30-80% charged; Red: discharged; flashing: charging
[6] After pressing the "ON" button, the keypad is available for up to 120 sec. after the last action, then it goes into stand-by mode
[7] Automatic function with double click possible on a country-by-country basis

⚠ **WARNING** When actuating motorised adjustments with the side rails raised, it must be ensured that nobody has any contact with the side rails, and that no body parts are sticking through the side rails or are trapped between the lying surface and the lower frame and/or floor!

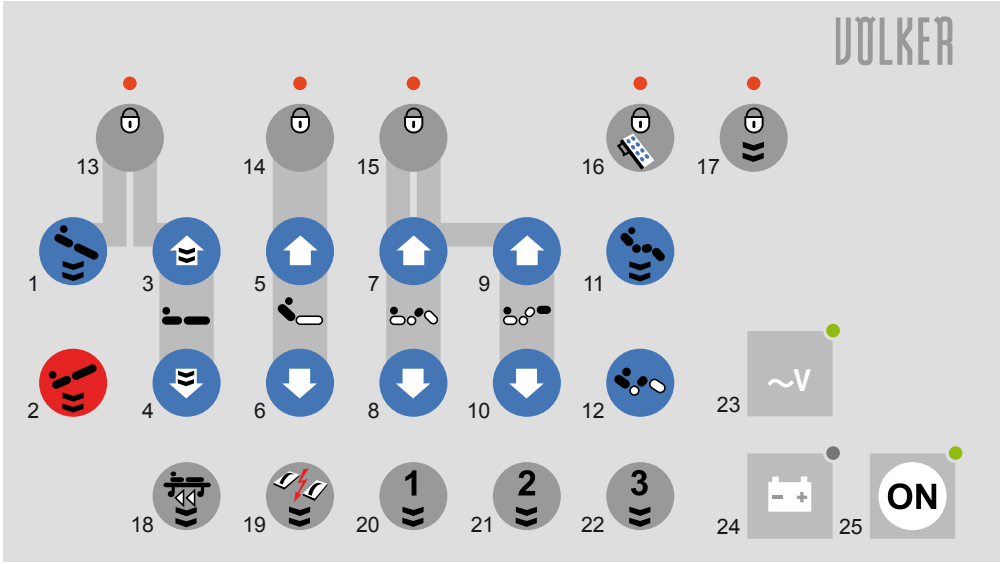
Functional description | Nurse keypad with individual lock/automatic functions (option) 4/5



1 Anti-Trendelenburg positioning [1, 10]
2 Trendelenburg positioning [2, 10]
3 Lying surface up [10]
4 Lying surface down [10]
5 Back section up
6 Back section down
7 Upper leg section up
8 Upper leg section down
9 Cardiac chair position [10]
10 Auto-Contour [3]
11 Lock lying surface lift and Anti-Trendelenburg positioning
12 Lock back section
13 Lock upper leg section
14 Lock hand control
15 Lock automatic function
16 Transport position [10]
17 Resuscitation position [10]
18 Automatic washing system position [4, 10]
19 Manual washing [5, 10]
20 Bed preparation [6, 10]
21 Mains voltage display [7]
22 Battery display [8]
23 "ON" switch [9]

[1] Head end raised
[2] Head end lowered
[3] Back and upper leg section raised simultaneously
[4] Height 80 cm, Anti-Trendelenburg positioning 5°, back section 25°
[5] Height 80 cm, back and upper leg section max. engaged
[6] Height 80 cm, back and upper leg section in zero position
[7] Green: mains voltage is on
[8] Green: >80% charged; yellow: 30-80% charged; red: discharged; flashing: charging
[9] After pressing the "ON" button, the keypad is available for up to 120 sec. after the last action, then it goes into stand-by mode
[10] Automatic function with double click possible on a country-by-country basis

⚠ **WARNING** When actuating motorised adjustments with the side rails raised, it must be ensured that nobody has any contact with the side rails, and that no body parts are sticking through the side rails or are trapped between the lying surface and the lower frame and/or floor!



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3 Lying surface up [10]
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5 Back section up
6 Back section down
7 Upper leg section up
8 Upper leg section down
9 Lower leg section up
10 Lower leg section down
11 Cardiac chair position [10]
12 Auto-Contour [3]
13 Lock lying surface lift and Anti-Trendelenburg positioning
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18 Transport position [10]
19 Resuscitation position [10]
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25 "ON" switch [9]

[1] Head end raised
[2] Head end lowered
[3] Back and upper leg section raised simultaneously
[4] Height 80 cm, Anti-Trendelenburg positioning 5°, back section 25°
[5] Height 80 cm, back and leg sections max. engaged
[6] Height 80 cm, back and leg sections in zero position
[7] Green: mains voltage is on
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[9] After pressing the "ON" button, the keypad is available for up to 120 sec. after the last action, then it goes into stand-by mode
[10] Automatic function with double click possible on a country-by-country basis

WARNING When actuating motorised adjustments with the side rails raised, it must be ensured that nobody has any contact with the side rails, and that no body parts are sticking through the side rails or are trapped between the lying surface and the lower frame and/or floor!

Functional description | Trapeze bar and accessory holders, accessory rail

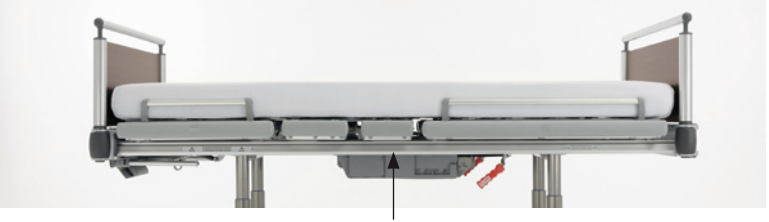
Holders for single trapeze bars (only head end) and accessories are located on the outside of the head and foot panels. A double trapeze holder on the inside of the head panel is also optionally available.

The trapeze bar and other accessories must be slotted into the holders until they audibly engage.

The safe working load of the trapeze bar is 75 kg.

⚠ **WARNING** Only original Völker trapeze bars should be used!

There is an accessory rail on either side of the bed to accommodate accessories.



Functional description | Versions and Options 1/2

The standard design of the bed can be supplied with various versions and options.

Independent of the fastening option, there are optional hand control and nurse keypads with different function keys.

Version/option	Description
Hand control (versions)	1. With hook (standard): 2. Transverse on the side rail with clip (option):
Nurse keypad	In bed linen storage area:
Castors	The standard design has 150 mm castors. Different types of castors are available as an option. The design and the diameter are variable. This can lead to the a variation in the lifting adjustment area of around 20 mm.
Bed extension (option)	The bed can be extended by 28 cm via a dynamic bed extension (20 cm on beds before year of construction 04/2010).

Functional description | Versions and Options 2/2

Version/option	Description
Side rails (versions)	The bed (except for design versions MA and MB) can be equipped with various side rail versions: Back/lower leg section*: 1. Can be pulled out up to 34* cm (standard) 2. Can be pulled out to 40* cm (version) * Measured from the top edge of the side rail to the lying surface (without the mattress).

This service manual covers all variants and options listed.

Precise details of the supplied bed designs can be found in the order specifications for your beds. If the original bed specification is no longer available, please contact Völker Customer Services. Make a note of the Völker serial number (ID No.) on the type label 🕮 160 before you call.

Functional description | Accessories 1/2

To offer the greatest possible degree of flexibility, Völker offers a wide range of easy-to-attach accessories. The beds are equipped as standard with holder devices for accessories, such as drip stands and trapeze bars. Urine bottle baskets, universal hooks, standard bars, etc., can be mounted on the accessory rails provided on both sides of the bed.

Further information about accessories can be found in our current information brochure or on the Internet at www.voelker.de 🕮. Our staff will gladly provide you with more details on the accessories that are available for your bed model.

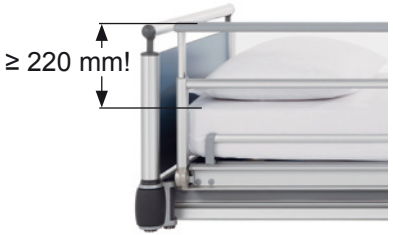
⚠ **WARNING** Only original Völker accessories should be used!

Mattresses

Mattress size	Mattress frame size	Density
88 x 190/200/210 x 12 cm	90 x 190/200/210 cm	40-50 kg/m³
98 x 190/200/210 x 12 cm	100 x 190/200/210 cm	40-50 kg/m³
108 x 200 x 12 cm	110 x 200 cm	40-50 kg/m³

To minimise the risk of injury, only use mattresses with the dimensions and properties detailed above. If you do not use Völker mattresses, please contact a dealer in whom you have confidence.

⚠ **DANGER** The height of the raised side rail above the mattress must always be greater than or equal to 220 mm; otherwise the patient may accidentally fall out of bed. Please note that the height of the mattress has a direct influence on this.



Use of securing systems

Securing systems such as belts or straps should only be used exactly as specified by the manufacturer.

If securing systems in the form of abdominal belts are used, then it must be ensured that the side rails are completely raised. In this case, the gap in the middle of the rails must be closed using a rail spacer.

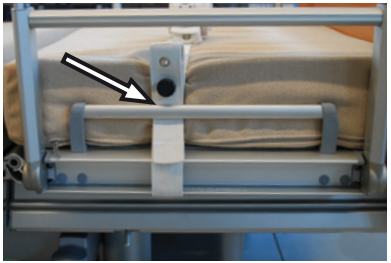
⚠ **DANGER** When using securing systems and rail spacers, please note the separate instructions for use pertaining to these accessories.

If the patient is restrained with the help of restraint holders, the lying surfaces must **never** be adjusted while the patient is restrained **and** must always be in the lowest position!

The lying surface adjustment functions must be locked when a patient is secured, and the hand control must be kept out of the patient's reach!

Restraints may be fastened directly onto beds built after 08/2009.

To do this, fasten the restraints on the corresponding longitudinal section of the lying surface frame. Make sure that the restraint is passed between the mattress holder and the mattress.



Initial startup

The **Initial startup** section describes how the bed is first set up.

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General operating instructions 🕮 28

Preparation 🕮 29

Electrical activation 🕮 30

Using the battery pack 🕮 31

Taking out of service 🕮 32

On-time

The maximum On-time for the electromotive bed functions is specified on the bed (type label 🕮 160) or in the technical data sheet.

4 min./10 min. means that each electromotive adjustment may be operated for a maximum of 4 minutes, after which a pause of 10 minutes is necessary (protection against overheating).

> ***NOTE*** Should the maximum On-time of 4 minutes be exceeded repeatedly or for longer periods, safety cut-out devices on the bed may cause the electromechanical motor system to shut down. The bed must not be manoeuvred using the motors until it has cooled down sufficiently!

Battery pack

The battery pack integrated in the double drive has a charge capacity that allows in theory a constant operation of 10 lifting and lying surface adjustments with a working load of 250 kg.

> ***NOTE*** If the bed is parked at its location and the mains plug is not connected, this will cause the battery pack to discharge due to the buffering of the electronic components!
>
> Deep-discharged battery packs can be damaged to the extent that premature replacement is needed!
>
> To increase the stand-by time, it is recommended to activate the reset button on the housing when storing the bed and to disconnect the bed from the mains. The bed should not be stored for a period longer than 6 months with a fully charged battery pack without recharging it.
>
> Appropriate and correct use of the battery pack is essential for it to have a long service life!

In order to guarantee electrical functionality at all times, the bed should be connected to the mains as much as possible.

Safety cut-out device

The bed is equipped with an electrical, self-resetting safety cut-out device that prevents overloading of the motor systems. In the event of very severe overloading, the bed is automatically switched off.

Conditions for set-up

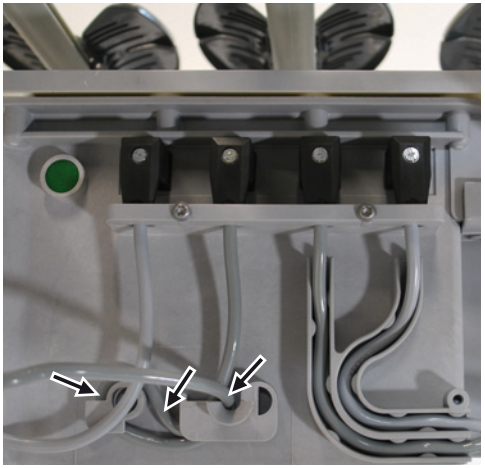
The bed is only approved for use in dry rooms (technical data sheet). A mains power supply and possibly a potential equalisation connection are required for operation of the bed in any suitable room. When this is available and the building installation permits it, the bed should always be connected to the potential equalisation.

Mechanical activation

The supplied head and foot sections must be slotted into the corner connectors on the bed frame.

Hand control connection

The hand control should be connected to the socket provided, where appropriate. The spiral cable must be routed so that it is not under tension.



Routing the hand control cable

Bed transport

The bed can be moved without auxiliary transportation devices. If necessary, release the brake.

⚠ **CAUTION** The bed should only be moved on a solid floor. Never attempt to push it over obstacles of over 2 cm in height. The maximum angle of inclination of the floor must not exceed 10°.

NOTE The bed must be transported by at least two people, taking hold of the bed at the head and foot section.

Bed transport by at least two people

⚠ **WARNING** Check the mains cable for damage. If the cable is damaged, the bed must not be used and must be taken out of service immediately!

NOTE Please be aware that incorrect handling of the mains isolation can lead to the battery pack no longer charging. Incorrect handling includes actions such as dropping the mains isolation, pulling the cable of the mains plug to remove it from the socket, clamping the mains cable between the lying surface and lying surface frame as well as running over the cable when transporting the bed.

1. Connect the mains plug to the mains power socket.
2. Press the green button on the mains isolation switch for one second to isolate the mains connection.

3. Unlock the locking switch on the reverse of the hand control using the key (open lock visible) in order to activate the bed's electrical functions.

Initial startup | Using the battery pack 1/2

The battery pack allows the bed to be operated independently of the mains supply for at least ten adjustment cycles.

The LED of the battery display on the nurse keypad displays three colours:

Green	The battery pack is more than 80% charged.
Yellow	The battery pack is 30-80% charged.
Red	DANGER ZONE. Battery pack is discharged.
Flashing	The battery pack is being charged.

If the LED is red or yellow, the battery pack needs to be recharged. The battery pack is switched off shortly before deep discharging. After the bed is connected to the mains supply, press any button on the hand control to render it fully functional again. The battery pack is charged when it is connected to the mains after every use or if the charge has fallen too low.

NOTE If the bed is stored for a long period without being connected to the mains supply, the battery pack can discharge. The degree of discharge depends on environmental conditions.

To increase the stand-by time, it is recommended to activate the reset button on the housing when storing the bed and to disconnect the bed from the mains. The bed should not be stored for a period longer than 6 months with a fully charged battery pack without recharging it.

NOTE The LED displays the battery pack's charging status during the charging cycle. The current cut-off is deactivated and current flows to the bed when the LED of the mains voltage display is green and the LED of the battery display flashes.

NOTE If the red LED lights up but the bed cannot be electrically adjusted, press the mains isolation switch.

WARNING If electromagnetic interference occurs with other equipment in the area around the bed, please refrain from using these devices.
When the bed is being transported, it must always be handled carefully and protected from moisture.

NOTE The bed is designed for use in an ambient temperature range from 10 °C to 40 °C, with a relative humidity of 30% to 75% and an air pressure of 700 to 1060 hPa.

WARNING The battery pack must only be replaced by personnel trained by Völker GmbH.

⚠ **WARNING** If the battery pack is faulty, degassing can occur. In rare cases, this can cause deformation of the battery pack housing. If this occurs, the bed must be immediately taken out of service and taken to an adequately ventilated room without sparks (from electricity or fire). Immediately inform customer services should this occur!

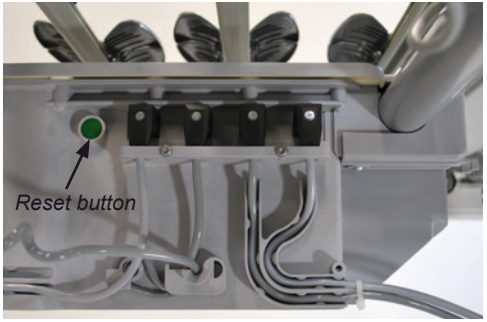
⚠ **WARNING** The battery pack must be disposed of in an environmentally responsible manner using the appropriate services. Alternatively, you can return it to Völker GmbH for disposal.

To start up the hand control and nurse keypad after switching on the bed, the hand control must be unlocked 🕮 13 and the nurse keypad switched on.

Taking out of service

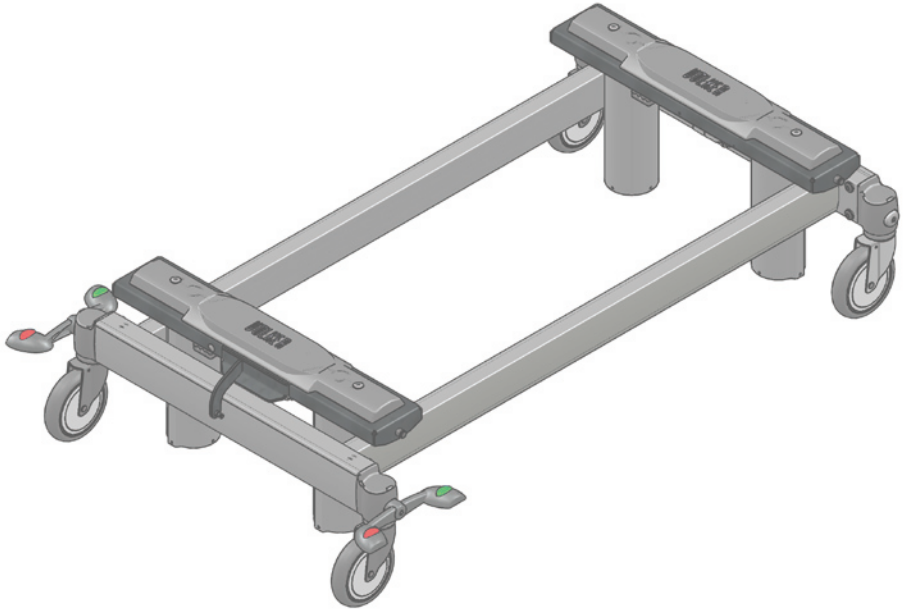
If the bed is to be taken out of service for longer than two weeks, the reset button on the dual drive must be pressed to de-energise the bed

The mains plug must also be pulled out and the reset button pressed before repair work.



Lower frame UG4

This section contains exploded views and assembly parts lists which are divided into corresponding individual parts as well as a description of how to replace the parts.



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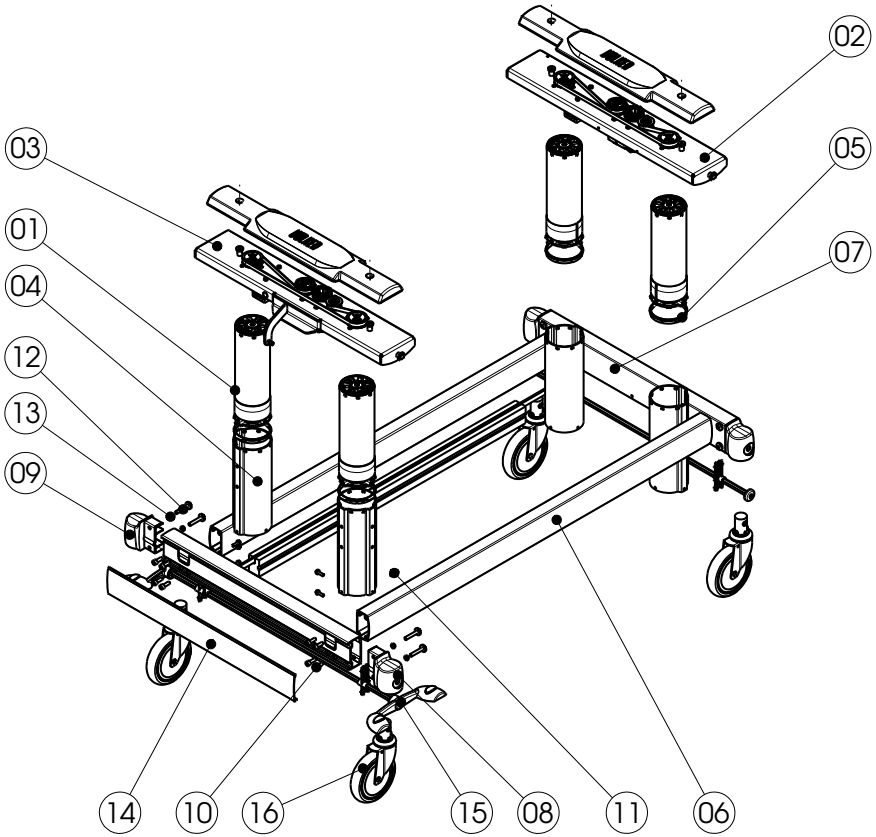
  - Replacing the spindle cartridge 🕮 36
- Lifting head cross-member, head 🕮 38
- Lifting head cross-member, foot 🕮 39
  - Replacing the lift motor 🕮 40
- Mechanical brake 🕮 42
- Castor set 🕮 43
  - Replacing the castor 🕮 44

Lower frame UG4 | Lower frame

Lower frame;
BG2641-01

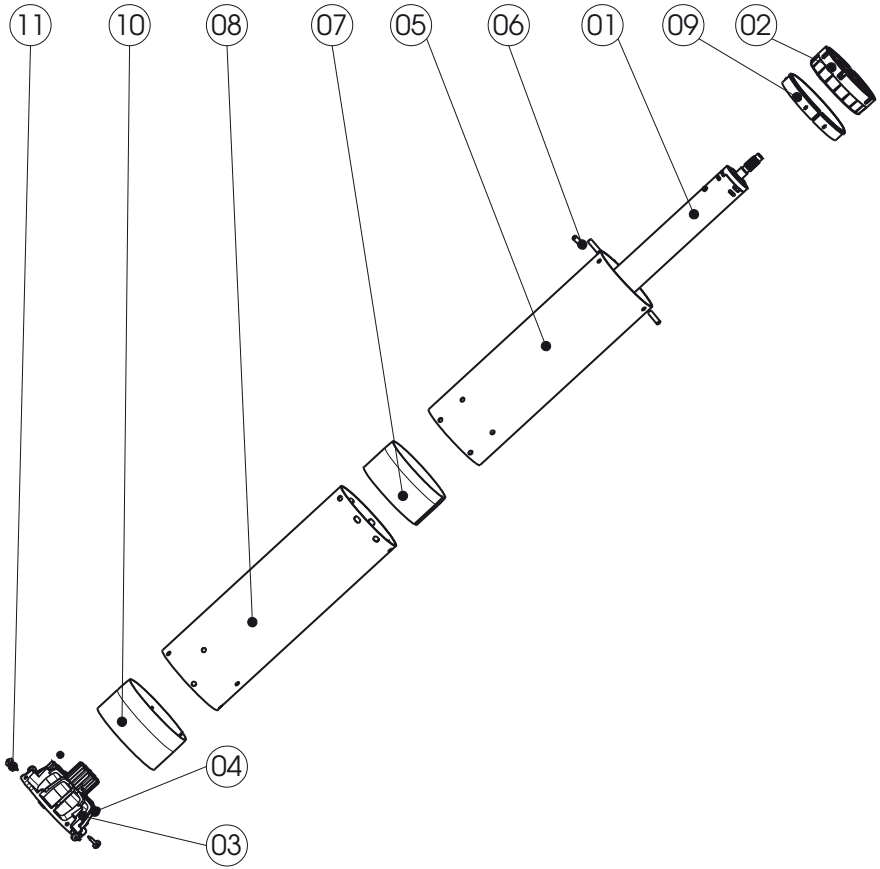
Item	Art. No.	Article	Qty
01	BG2637	Lifting column long	4
02	BG3267	Lifting head cross-member, head	1
03	BG3268	Lifting head cross-member, foot	1
04	AP2218	Outer foot	4
05	KT1266	Outer foot slip-ring	4
06	AP2214	Longitudinal profile	2
07	AP2211-01	Cross member	2
08	F2062-01	Foot castor support, right	2
09	F2072-01	Foot castor support, left	2
10	SR596	Thread tapping screw M8x23	16
11	SR2110	Thread tapping screw M6x20	16
12	SR739	Flat–headed screw M8x45	8
13	SR469	Hexagonal nut M8	8
14	AP2062	Cross member cover	2
15	BG1244-02	Mechanical brake	1
16	BG2495	Castor set	1



Lower frame UG4 | Lower frame | Lifting column long

Lifting column long;
BG2637

Item	Art. No.	Article	Qty
01	BG2353	Spindle cartridge	1
02	BG1833	Bearing seat	1
03	KT2209-02	Bearing seat	1
04	SR1293	Fillister head sheet metal screw 3.9x6.5	2
05	AP1114	Inner foot	1
06	SR2271	Threaded pin with tip M5x20	4
07	KT1124	Spacer ring	1
08	AP1113	Centre foot	1
09	KT1123	Slip-ring	1
10	KT1129	Spacer ring	1
11	SR2023	Chipboard screw 4.5x16	4



Lower frame UG4 | Lower frame | Replacing the spindle cartridge 1/2

01. Tools required (Fig. 01).
02. Move bed into lowermost position and raise back and/or lower leg section. (Not illustrated).
03. Remove cover (Fig. 03).
04. Remove fastening nuts on belt wheel (Fig. 04).
05. Remove cover thrust washer (Fig. 05)
06. Loosen belt tightener (Fig. 06) and remove toothed belt.
07. Remove belt wheel (Fig. 07).

Fig. 01

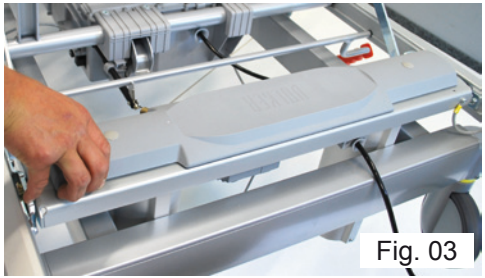


Fig. 03

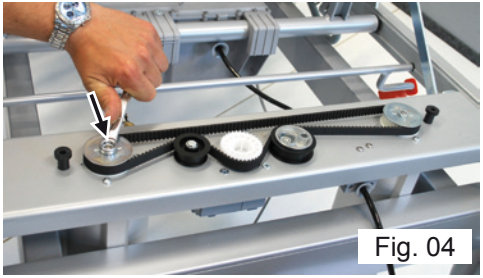


Fig. 04

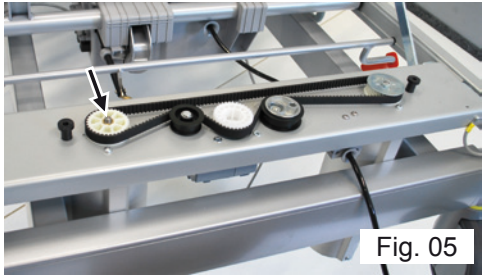


Fig. 05

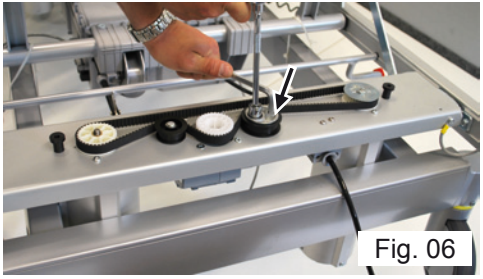


Fig. 06

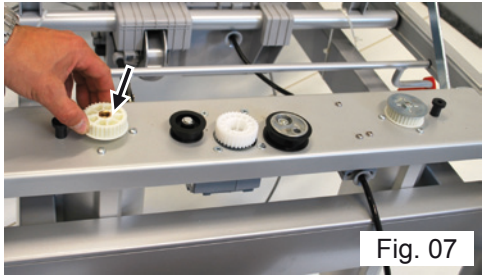


Fig. 07

08. Remove fastening screws (Fig. 08).
09. Raise bed so that the spindle cartridge can be removed downwards (not illustrated).
10. Remove fastening screws (Fig. 10).
11. Remove spindle cartridge with bearing seat (Fig. 11).
12. Remove fastening screws (Fig. 12).
13. Installation in reverse order (not illustrated).

To install the toothed belt 🕮 40 follow items 08-10.

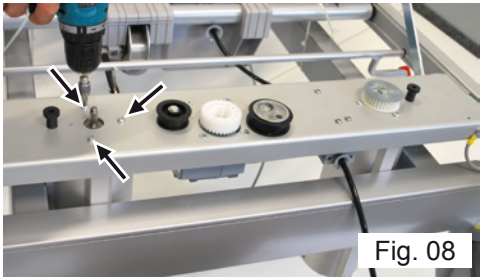


Fig. 08

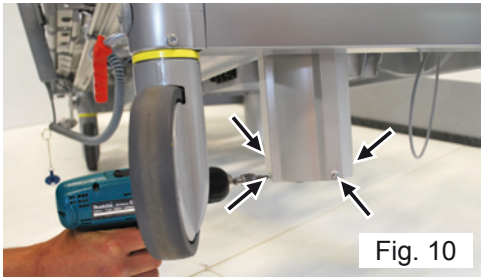


Fig. 10

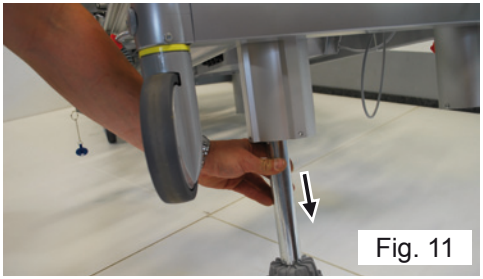


Fig. 11

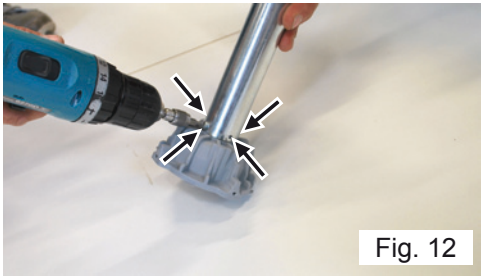
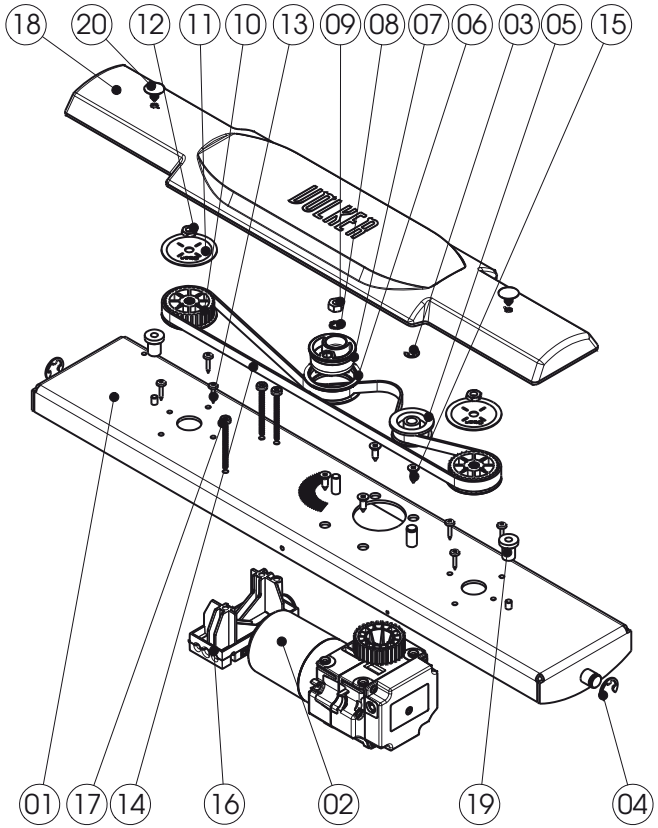


Fig. 12

Lifting head cross-member, head;
BG3267

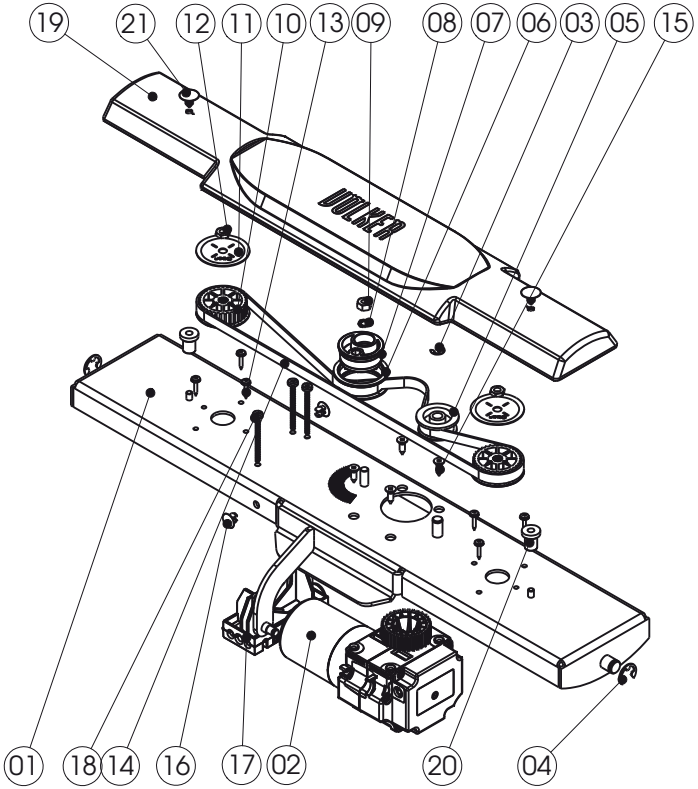
Item	Art. No.	Article	Qty
01	F3048	Lifting head cross-member, head	1
02	BG2374-01	Lift motor, head	1
03	SR163	Locking washer	1
04	SR165	Locking washer	2
05	KT1168	Tensioning pulley	1
06	KT515	Castor, belt tightener	1
07	F1531-01	Belt tightener	1
08	SR1296	Schnorr washer VS8	1
09	SR055	Hexagonal nut M8	1
10	KT2286	Belt wheel	2
11	F2335	Thrust washer	2
12	SR2193	Hexagonal nut M8x1	2
13	SR2062	Chipboard screw 5x20	6
14	KT2224	Toothed belt	1
15	SR324	Countersunk head sheet metal screw 5.5x19	4
16	KT2778-02	Cable clamp	1
17	SR2486	Remform WN 156-2 5.0x60	3
18	KT2735	Lifting head cross-member cover	1
	KT2659-03	*Lifting head cross-member cover (to year of construction fall 2010)*	*1*
19	SR2485	ISO blind nut	2
20	KT2688	Snap nail	2



Lower frame UG4 | Lower frame | Lifting head cross-member, foot

Lifting head cross-member, foot;
BG3268

Item	Art. No.	Article	Qty
01	F3049	Lifting head cross-member, foot	1
02	BG2375-01	Lift motor, foot	1
03	SR163	Locking washer	1
04	SR165	Locking washer	2
05	KT1168	Tensioning pulley	1
06	KT515	Castor, belt tightener	1
07	F1531-01	Belt tightener	1
08	SR1296	Schnorr washer VS8	1
09	SR055	Hexagonal nut M8	1
10	KT2286	Belt wheel	2
11	F2335	Thrust washer	2
12	SR2193	Hexagonal nut M8x1	2
13	SR2062	Chipboard screw 5x20	6
14	KT2224	Toothed belt	1
15	SR324	Countersunk head sheet metal screw 5.5x19	4
16	KT174	Cable clamp	2
17	KT2778-02	Cable clamp	1
18	SR2486	Remform WN 156-2 5.0x60	3
19	KT2735	Lifting head cross-member cover	1
	KT2696-01	*Lifting head cross-member cover (to year of construction fall 2010)*	*1*
20	SR2485	ISO blind nut	2
21	KT2688	Snap nail	2



Lower frame UG4 | Lower frame | Replacing the lift motor 1/2

01. Tools required (Fig. 01).
02. Connect Gateway or VDS (Völker Diagnostic System) (if installed) (Fig. 2).
03. For head end replacement: move bed down and back section up (not illustrated).
    For foot end replacement: move bed down and leg sections up (not illustrated).
04. Remove cover (Fig. 04).
05. Loosen belt tightener (Fig. 05) and remove toothed belt.
06. Unscrew motor → hold firmly with one hand (Fig. 06).
07. Unscrew plug and replace motor (Fig. 07).
08. Move motor to installation position (only possible with Gateway or VDS) (not illustrated). Replacement lift motors are also in the installation position when delivered.

Fig. 01

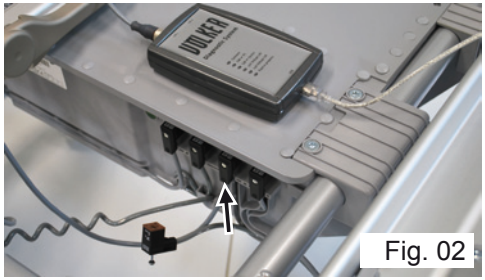


Fig. 02

Fig. 04

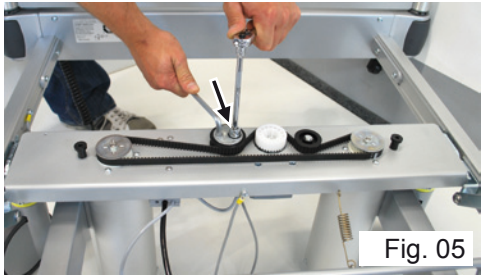


Fig. 05

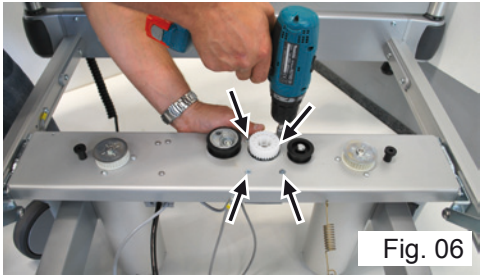


Fig. 06

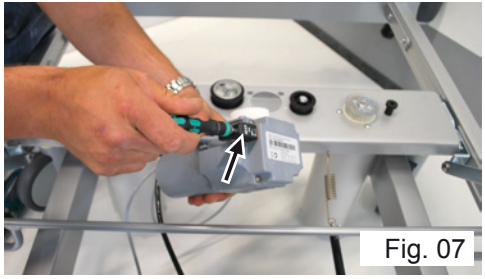


Fig. 07

09. Turn spindles and drive pinions clockwise as far as the limit stop (Fig. 09).
10. Fit belt and tighten. Check tensioning - OK, if belt can be pressed via screw (Fig. 10).
11. Remaining installation in reverse order (not illustrated).

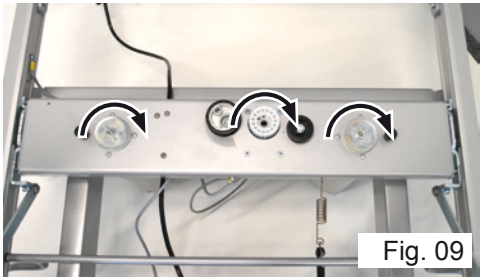


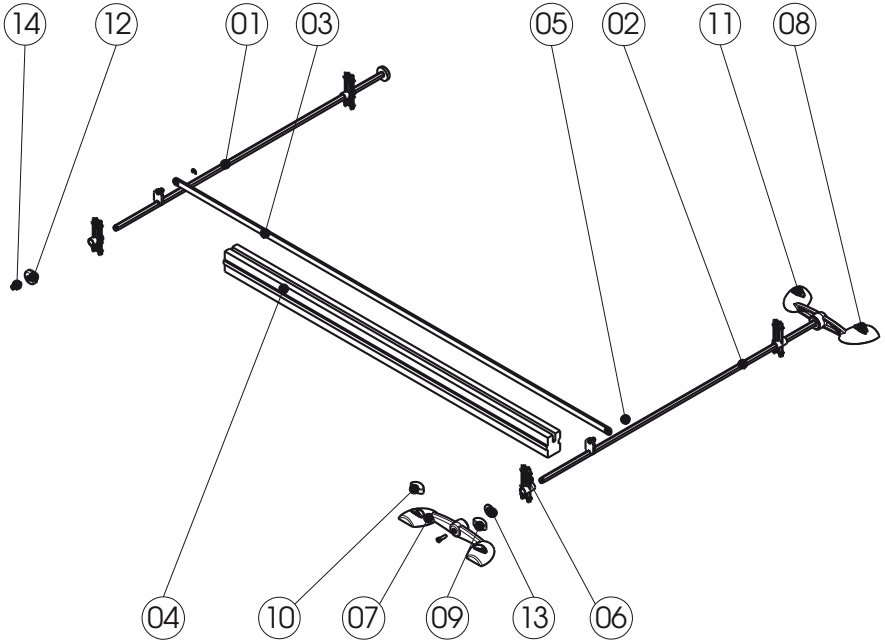
Fig. 09

Fig. 10

Lower frame UG4 | Lower frame | Mechanical brake

Mechanical brake;
BG1244-02

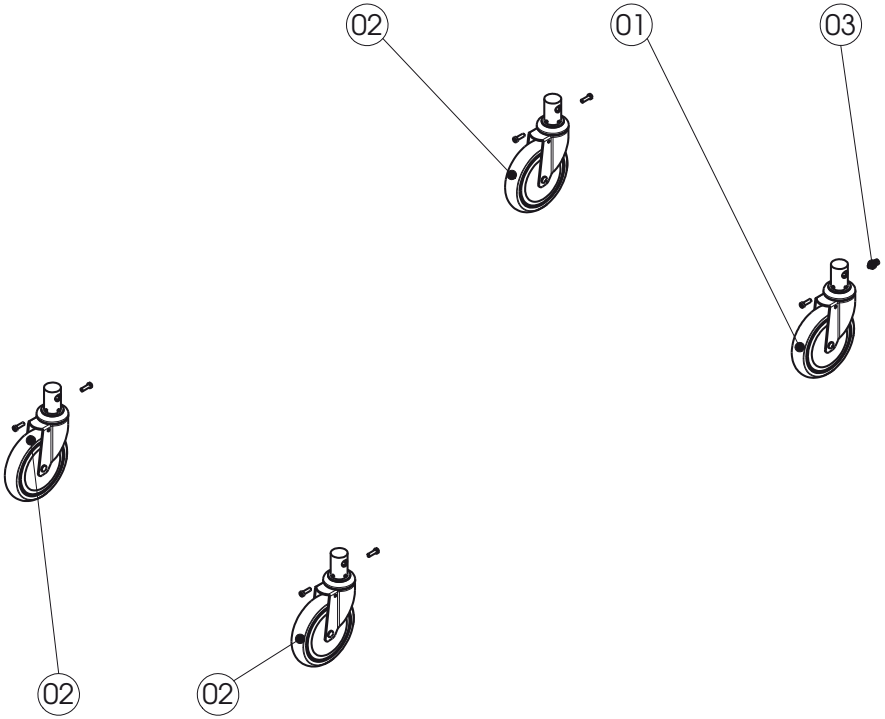
Item	Art. No.	Article	Qty
01	F2093	Head brake shaft	1
02	F2095	Foot brake shaft	1
03	F2279	Push rod	1
04	KT216	Insulation strips	1
05	SR1299	Locking washer	2
06	KT2050-01	Shaft guide	4
07	F2068-02	Double foot pedal	2
08	KT2035	Pedal rubber, red, right	1
09	KT2036	Pedal rubber, red, left	1
10	KT2051	Pedal rubber, green, right	1
11	KT2052	Pedal rubber, green, left	1
12	KT2049	Cover, head castor support	2
13	SR742	Washer Ø28xØ14.5x1.5	2
14	SR2218	Cylinder head screw M6x20	4



Lower frame UG4 | Lower frame | Castor set

Castor set;
BG1262-03

Item	Art. No.	Article	Qty
01	R2010-01	Swivel castor with directional locking	1
02	R2011-01	Swivel castor with central locking	3
03	SR2218	Cylinder head screw M6x20	8



Castor options

	Art. No.	Article
	R2010-01	Swivel castor with directional locking
	R2011-01	Swivel castor with central locking
	R120-01	Integral castor with directional locking
	R121-01	Integral castor with total locking
	R124-01	Dual castor with directional locking
	R125-01	Dual castor with total locking

01. Tools required (Fig. 01).
02. Raise bed so that the castor is free (not illustrated).
03. Prize cross member cover off cross member using a slot head screwdriver (clamp connection) (Fig. 03).
04. Remove screw in the centre of the double foot pedal (Fig. 04), and pull double foot pedal of brake shaft.
05. Remove screws (Fig. 05).
06. Remove screws (Fig. 06).
07. Remove castor holder and castor (Fig. 07).
08. Installation in reverse order (not illustrated).

Important: Both screws (Fig. 05) are glued in and must be glued again during assembly (high-strength screw locking).
Important: Note trip cam position during installation!

Fig. 01

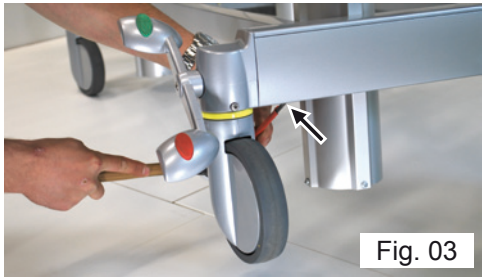


Fig. 03

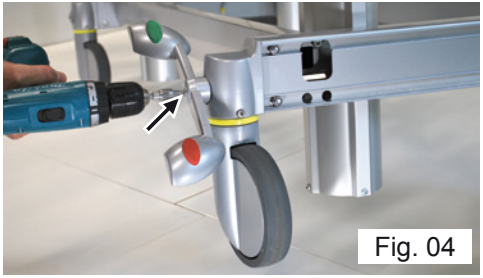


Fig. 04

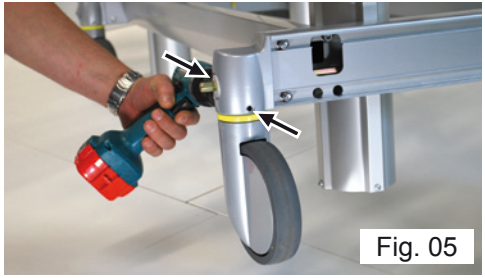


Fig. 05

Fig. 06

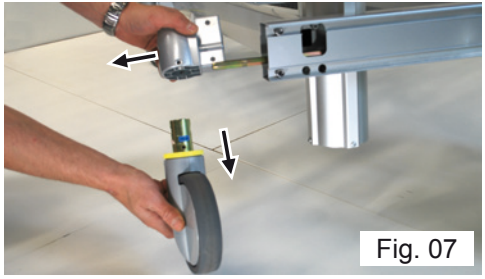
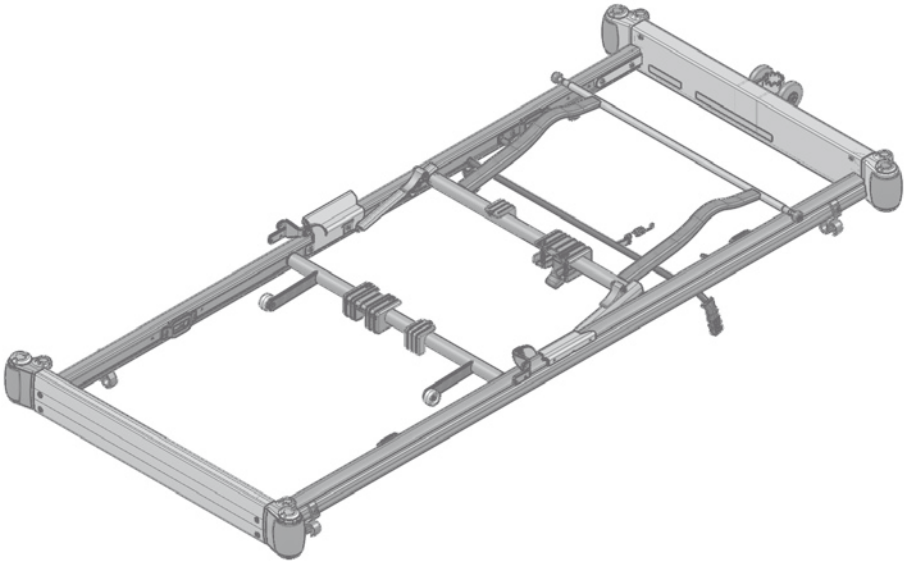


Fig. 07

Frame

This section contains exploded views and assembly parts lists which are divided into corresponding individual parts as well as a description of how to replace the parts.



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- Motor frame fitting set 🕮 56
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- Fasteners DA01 🕮 59
- Dynamic bed extension (option) 🕮 60
- Foot section extension (option) 🕮 64

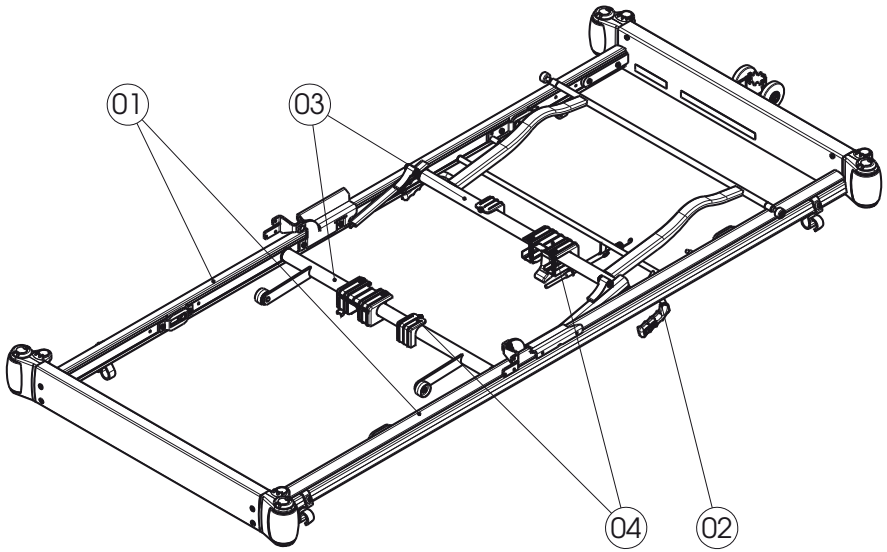
Frame | Frame

Frame for lying surface 200x90 cm;
BG2642-01

Item	Art. No.	Article	Qty
01	BG3103-02	Panel set	1
02	BG688-01	CPR	1
03	BG2432	Motor frame fitting set	1
04	BG2497-01	Dual drive fasteners	1

Frame variants

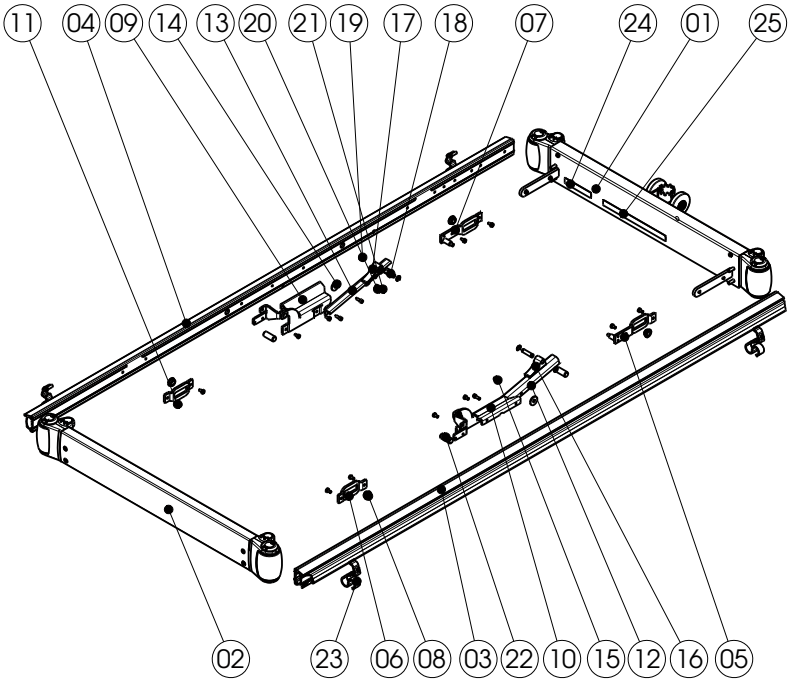
Width	Designation	200	210
90	Complete assembly	BG2642-01	BG2984-01
	Panel set	BG3103-02	BG3137-02
	CPR	BG688-01	
	Motor frame fitting	BG2432	
	Fasteners	BG2497-01	
100	Complete assembly	BG2986-01	BG2987-01
	Panel set	BG3180-02	BG3184-02
	CPR	BG688-01	
	Motor frame fitting	BG2710	
	Fasteners	BG2497-01	



Frame | Frame | Panel set 1/4

Panel set for lying surface 200x90 cm;
BG3103-02

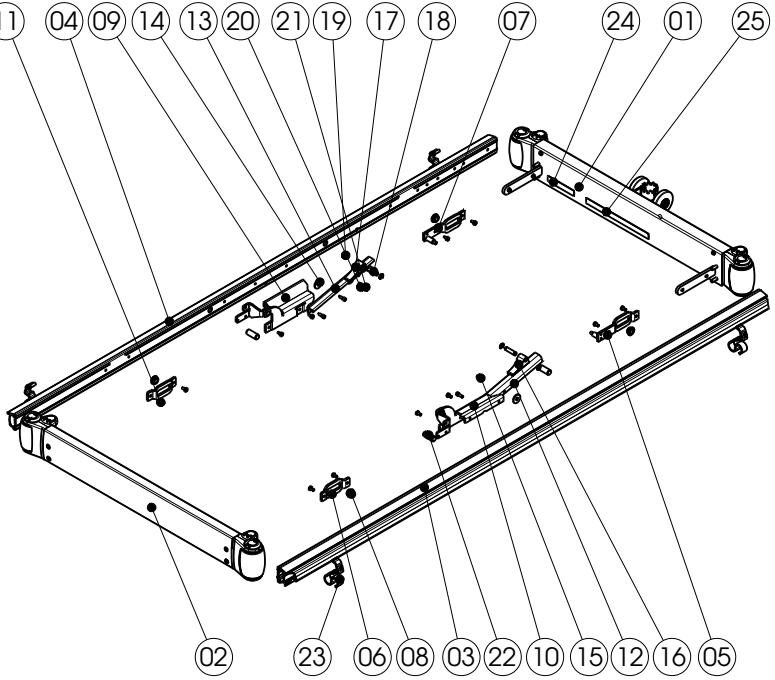
Item	Art. No.	Article	Qty
01	BG3016-01	Head panel	1
02	BG3248-01	Foot section panel	1
03	AP2992-01	Side panel, right	1
04	AP2993-01	Side panel, left	1
05	F2895-01	Head bearing block, right	1
06	F2899	Foot bearing block	2
07	F2896-01	Head bearing block, left	1
08	B2012-01	Brass bushing	4
09	F2042	Seat section joint, right	1
10	F2041	Seat section joint, left	1
11	SR2234	Thread tapping screw M6x12	12
12	AP1056	Slide profile, left	1
13	AP1055	Slide profile, right	1
14	SR357	Washer	2
15	SR532	Cylinder head screw M6x18	4
16	KT1005	Slide, left	1
17	KT198	Slide, right	1
18	F2847	Bolt Ø10x8_43	2
19	SR356	Locking washer	4
20	SR038	Cable clip	1
21	SR2119	Oval-head screw M4x8	1
22	F3093	Bearing pin	4
23	KT2176	Cable hook	4
24	T2009	Label 110x20 mm	1
25	T2010	Label 260x20 mm	1



Frame | Frame | Panel set 2/4

Panel set for lying surface 210x90 cm;
BG3137-02

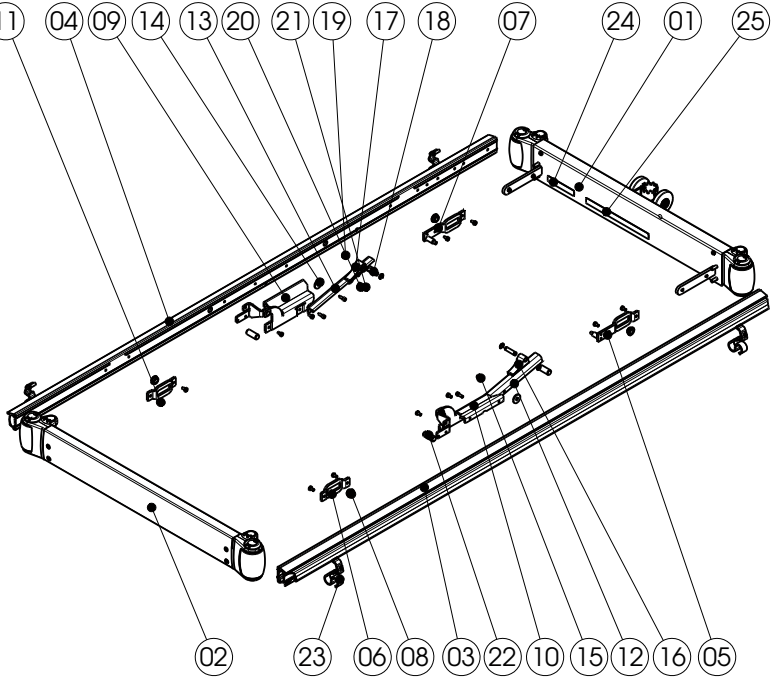
Item	Art. No.	Article	Qty
01	BG3016-01	Head panel	1
02	BG3248-01	Foot section panel	1
03	AP3056-01	Side panel, left	1
04	AP3055-01	Side panel, right	1
05	F2895-01	Head bearing block, right	1
06	F2899	Foot bearing block	2
07	F2896-01	Head bearing block, left	1
08	B2012-01	Brass bushing	4
09	F2042	Seat section joint, right	1
10	F2041	Seat section joint, left	1
11	SR2234	Thread tapping screw M6x12	12
12	AP1056	Slide profile, left	1
13	AP1055	Slide profile, right	1
14	SR357	Washer	2
15	SR532	Cylinder head screw M6x18	4
16	KT1005	Slide, left	1
17	KT198	Slide, right	1
18	F2847	Bolt Ø10x8_43	2
19	SR356	Locking washer	4
20	SR038	Cable clip	1
21	SR2119	Oval-head screw M4x8	1
22	F3093	Bearing pin	4
23	KT2176	Cable hook	4
24	T2009	Label 110x20 mm	1
25	T2010	Label 260x20 mm	1



Frame | Frame | Panel set 3/4

Panel set for lying surface 200x100 cm;
BG3180-02

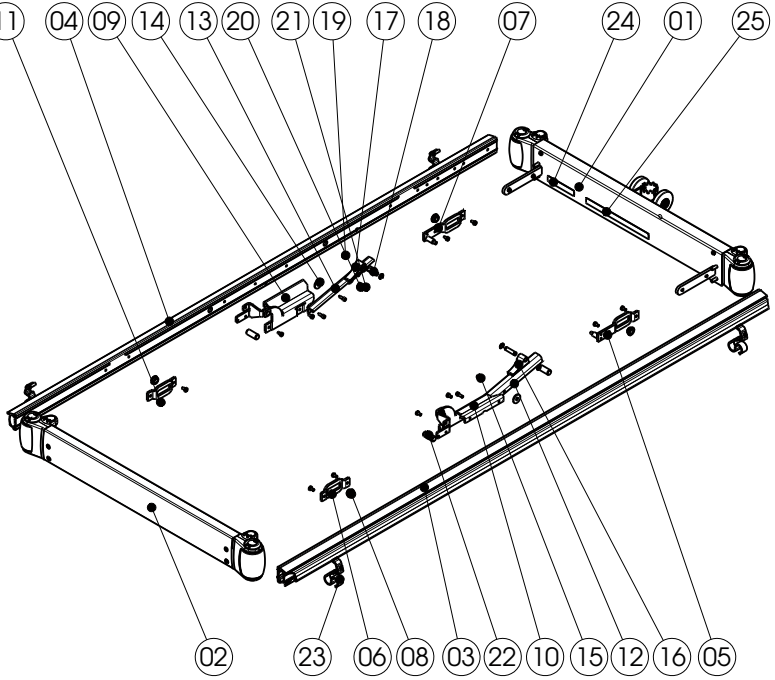
Item	Art. No.	Article	Qty
01	BG3017-01	Head panel	1
02	BG3249-01	Foot section panel	1
03	AP3083-01	Side panel, left	1
04	AP3082-01	Side panel, right	1
05	F2895-01	Head bearing block, right	1
06	F2899	Foot bearing block	2
07	F2896-01	Head bearing block, left	1
08	B2012-01	Brass bushing	4
09	F932	Seat section joint, right	1
10	F931	Seat section joint, left	1
11	SR2234	Thread tapping screw M6x12	12
12	AP1056	Slide profile, left	1
13	AP1055	Slide profile, right	1
14	SR357	Washer	2
15	SR532	Cylinder head screw M6x18	4
16	KT1005	Slide, left	1
17	KT198	Slide, right	1
18	F2847	Bolt Ø10x8_43	2
19	SR356	Locking washer	4
20	SR038	Cable clip	1
21	SR2119	Oval-head screw M4x8	1
22	F3093	Bearing pin	4
23	KT2176	Cable hook	4
24	T2009	Label 110x20 mm	1
25	T2010	Label 260x20 mm	1



Frame | Frame | Panel set 4/4

Panel set for lying surface 210x100 cm;
BG3184-02

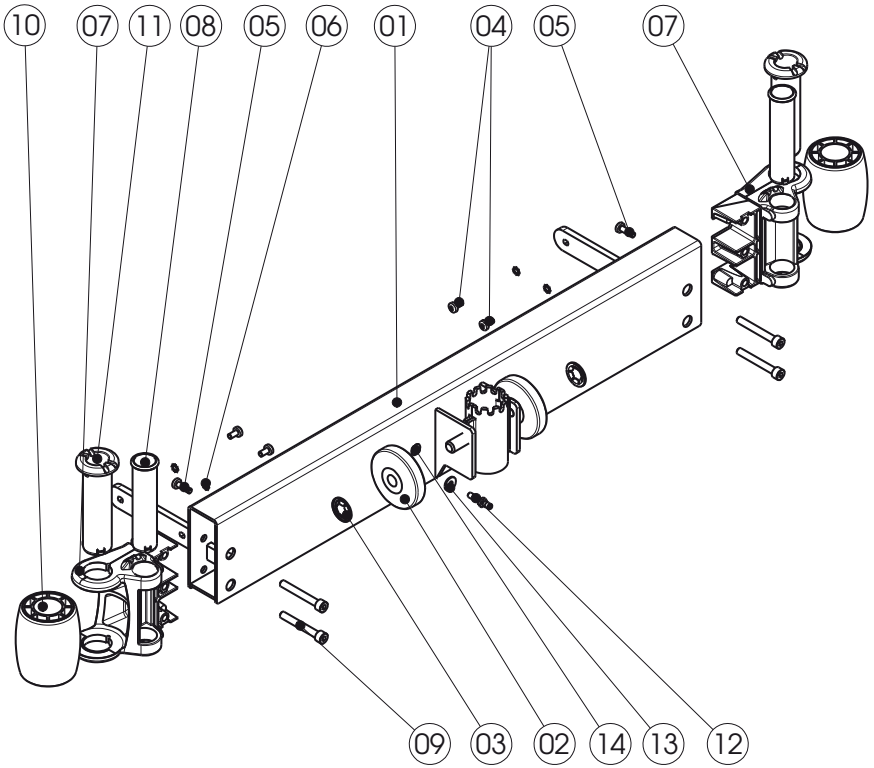
Item	Art. No.	Article	Qty
01	BG3017-01	Head panel	1
02	BG3249-01	Foot section panel	1
03	AP3093-01	Side panel, left	1
04	AP3092-01	Side panel, right	1
05	F2895-01	Head bearing block, right	1
06	F2899	Foot bearing block	2
07	F2896-01	Head bearing block, left	1
08	B2012-01	Brass bushing	4
09	F932	Seat section joint, right	1
10	F931	Seat section joint, left	1
11	SR2234	Thread tapping screw M6x12	12
12	AP1056	Slide profile, left	1
13	AP1055	Slide profile, right	1
14	SR357	Washer	2
15	SR532	Cylinder head screw M6x18	4
16	KT1005	Slide, left	1
17	KT198	Slide, right	1
18	F2847	Bolt Ø10x8_43	2
19	SR356	Locking washer	4
20	SR038	Cable clip	1
21	SR2119	Oval-head screw M4x8	1
22	F3093	Bearing pin	4
23	KT2176	Cable hook	4
24	T2009	Label 110x20 mm	1
25	T2010	Label 260x20 mm	1



Frame | Frame | Panel set | Head panel 1/2

Head panel for lying surface 90 cm;
BG3016-01

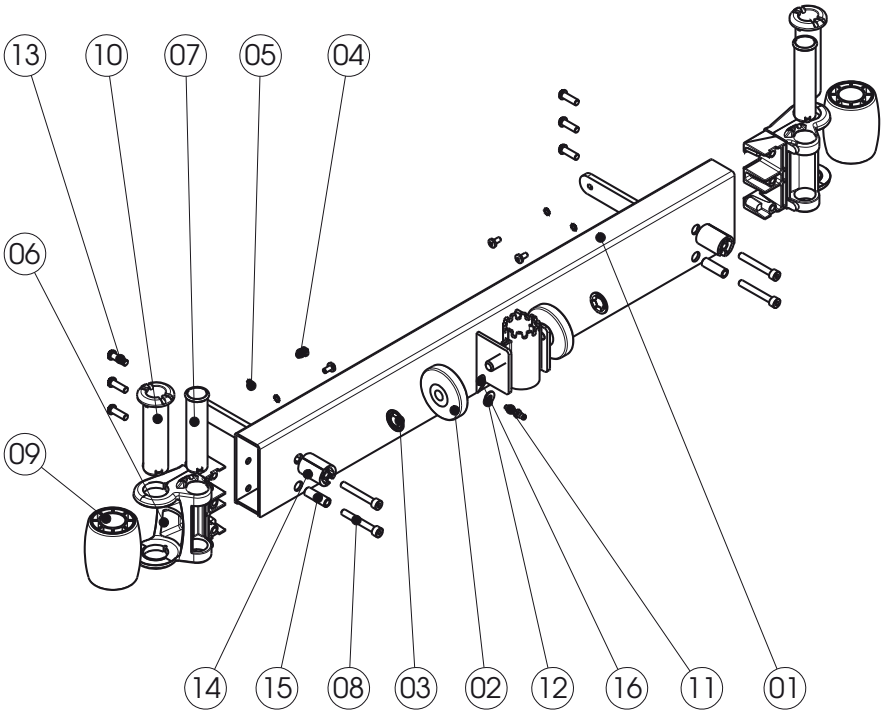
Item	Art. No.	Article	Qty
01	BG3018-02	Head section panel	1
02	R197	Wall spacing roll	2
03	SR479	Locking washer	2
04	SR2234	Thread tapping screw M6x12	4
05	SR2213	Thread tapping screw M6x20	2
06	SR018	Toothed lock washer	4
07	F2233	Corner piece	2
08	KT2030	Drip holder insertion sleeve	2
09	SR2058	Cylinder head screw M8x60	4
10	KT2029	Spacing roll	2
11	KT2031-01	Corner piece insertion sleeve	2
12	E421	Potential plug	1
13	E422	Colour marking disk	1
14	T2016	Adhesive label, potential connection	1



Frame | Frame | Panel set | Head panel 2/2

Head panel for lying surface 100 cm;
BG3017

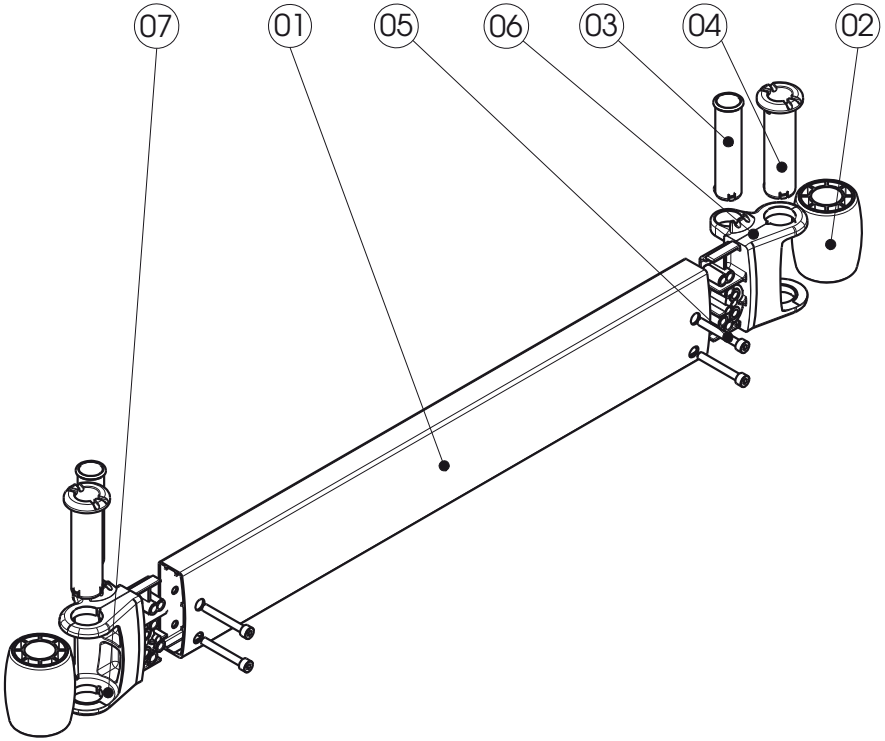
Item	Art. No.	Article	Qty
01	BG3019-01	Head section panel	1
02	R197	Wall spacing roll	2
03	SR479	Locking washer	2
04	SR2234	Thread tapping screw M6x12	4
05	SR018	Toothed lock washer	4
06	F2233	Corner piece	2
07	KT2030	Drip holder insertion sleeve	2
08	SR2058	Cylinder head screw M8x60	4
09	KT2029	Spacing roll	2
10	KT2031-01	Corner piece insertion sleeve	2
11	E421	Potential plug	1
12	E422	Colour marking disk	1
13	SR352	Thread tapping screw M8x25	6
14	AP1092	Spacer 30x8.2x37.5	2
15	F1419	Spacer	2
16	T2016	Adhesive label, potential connection	1



Frame | Frame | Panel set | Foot panel 1/2

Foot panel for lying surface 90 cm;
BG3248-01

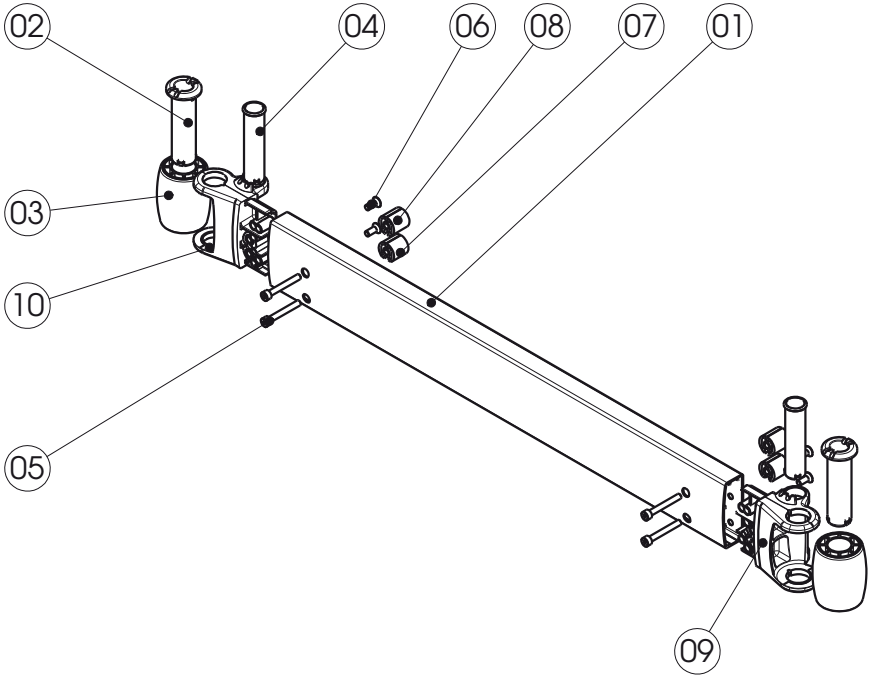
Item	Art. No.	Article	Qty
01	AP3100	Foot panel	1
02	KT2029	Spacing roll	2
03	KT2030	Drip holder insertion sleeve	2
04	KT2031-01	Corner piece insertion sleeve	2
05	SR2058	Cylinder head screw M8x60	4
06	F2860-02	Foot panel corner piece, right	1
07	F2861-02	Foot panel corner piece, left	1



Frame | Frame | Panel set | Foot panel 2/2

Foot panel for lying surface 100 cm;
BG3249-01

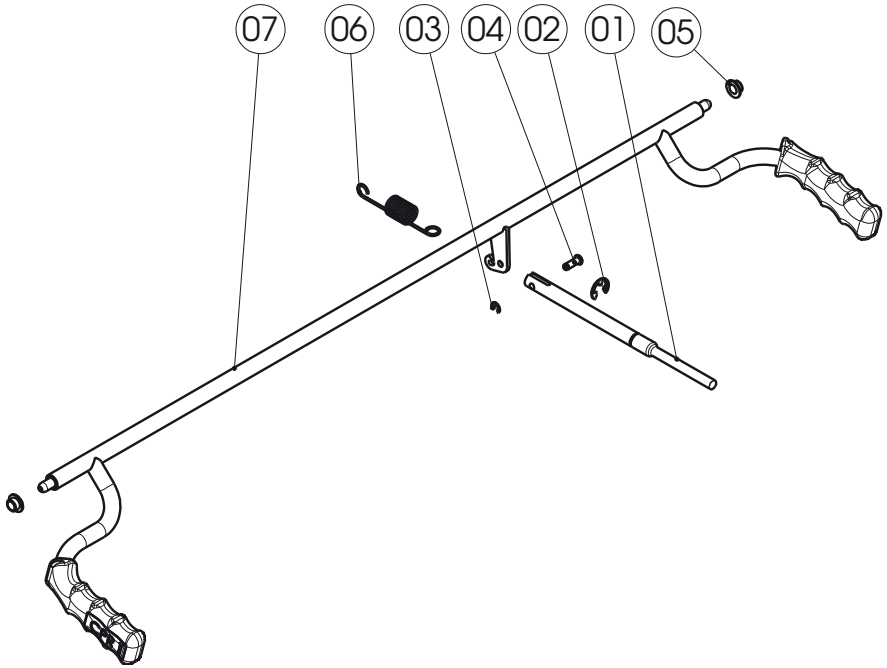
Item	Art. No.	Article	Qty
01	AP3101	Foot panel	1
02	KT2031-01	Corner piece insertion sleeve	2
03	KT2029	Spacing roll	2
04	KT2030	Drip holder insertion sleeve	2
05	SR2058	Cylinder head screw M8x60	4
06	SR2041	Countersunk screw M8x20	4
07	AP919	Spacer 30x8.2x28	2
08	AP920	Spacer 30x8.2x30	2
09	F2860-02	Foot panel corner piece, right	1
10	F2861-02	Foot panel corner piece, left	1



Frame | Frame | CPR (cardiopulmonary resuscitation)

CPR;
BG688-01

Item	Art. No.	Article	Qty
01	KT447-01	CPR push rod	1
02	SR2407	Locking washer	1
03	SR682	Locking washer	1
04	SR758	Safety bolt	1
05	B005	Bushing with collar	2
06	FE2009-01	CPR tension spring	1
07	BG697-02	CPR actuation	1



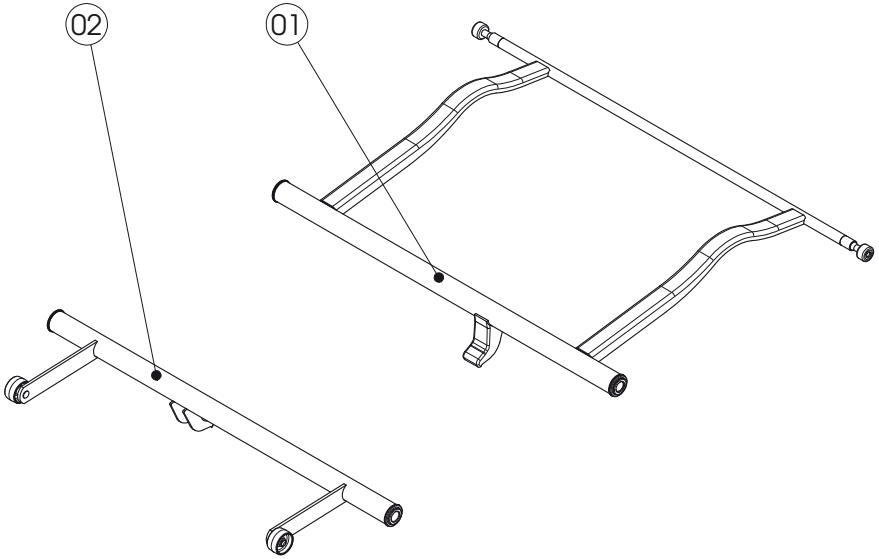
Frame | Frame | Motor frame fitting set

Motor frame fitting set for lying surface 90 cm;
BG2432

Item	Art. No.	Article	Qty
01	BG684	Motor frame fitting, back section	1
02	BG685	Motor frame fitting, upper leg section	1

Motor frame fitting set for lying surface 100 cm;
BG2710

Item	Art. No.	Article	Qty
01	BG2719	Motor frame fitting, back section	1
02	BG685	Motor frame fitting, upper leg section	1



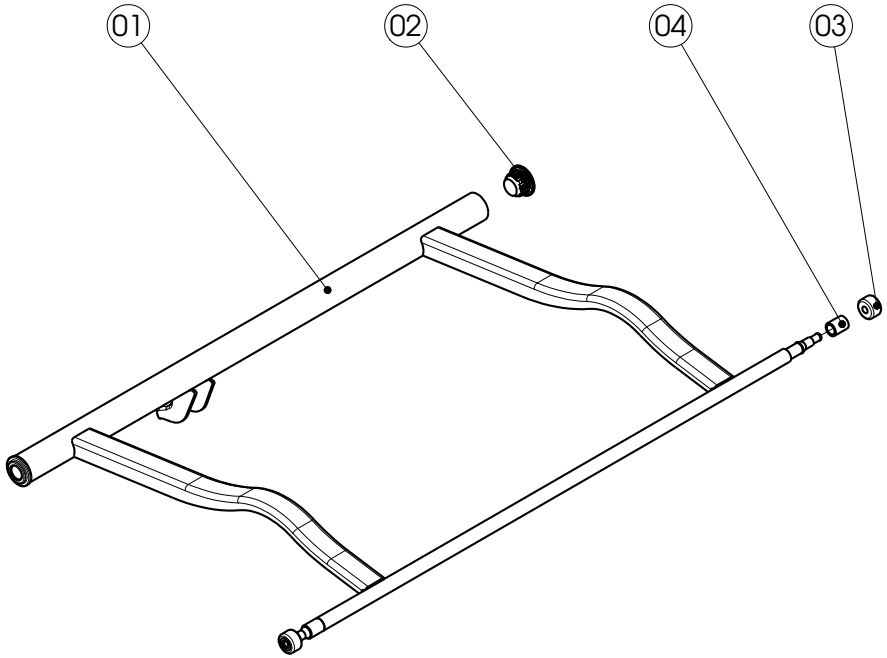
Frame | Frame | Motor frame fitting set | Motor frame fitting, back section

Motor frame fitting,
back section for lying surface 90 cm;
BG684

Item	Art. No.	Article	Qty
01	F2799	Motor frame fitting, back section	1
02	KT1110	Bushing	2
03	KT224	Castor	2
04	KT2553	PVC hose	2

Motor frame fitting,
back section for lying surface 100 cm;
BG2719

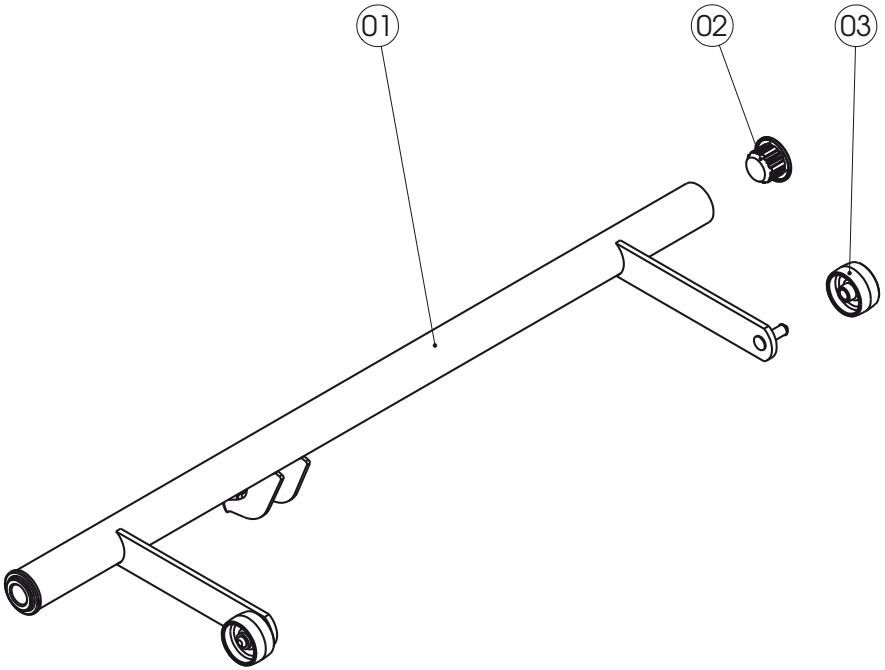
Item	Art. No.	Article	Qty
01	F2912	Motor frame fitting, back section	1
02	KT1110	Bushing	2
03	KT224	Castor	2
04	KT2553	PVC hose	2



Frame | Frame | Motor frame fitting set | Motor frame fitting, upper leg section

Motor frame fitting, upper leg section
for lying surface 90-100 cm;
BG685

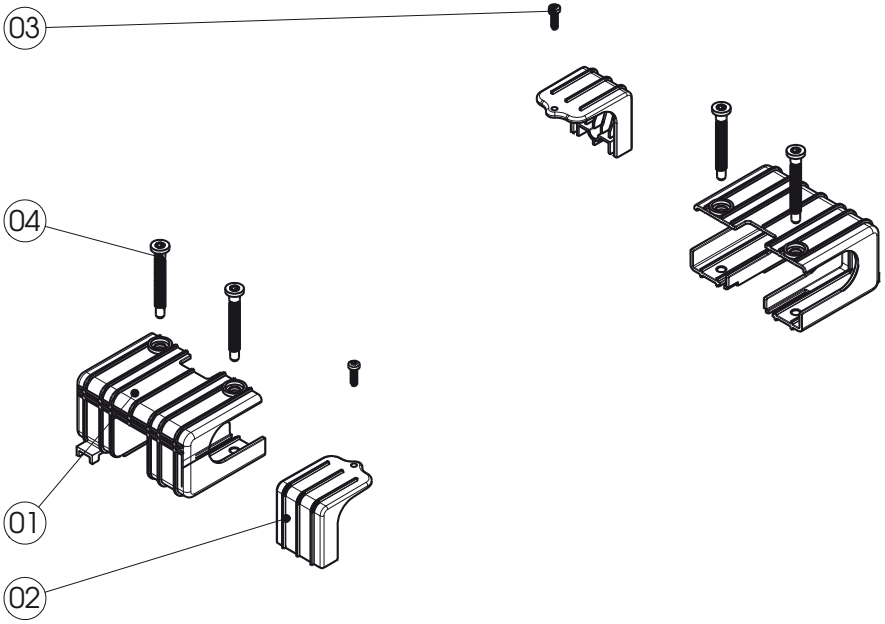
Item	Art. No.	Article	Qty
01	F2800	Motor frame fitting, upper leg section	1
02	KT1110	Bushing	2
03	KT2555	Castor	2



Frame | Frame | Dual drive DA01 fasteners

Dual drive DA01 fasteners;
BG2497-01

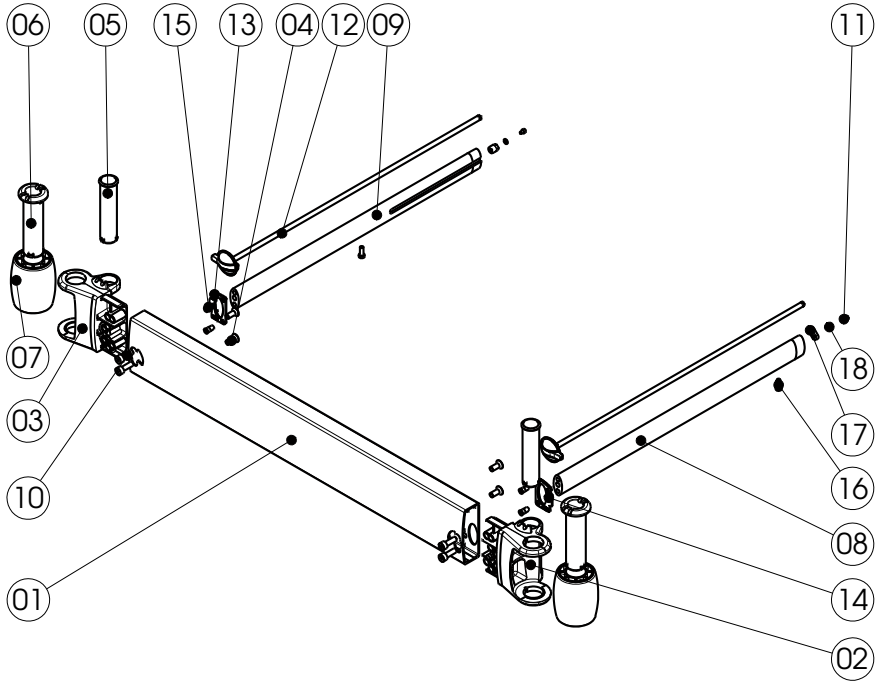
Item	Art. No.	Article	Qty
01	KT439-01	Clamp, large	2
02	KT495-01	Clamp, small	2
03	SR725	Remform 4x20	2
04	SR2417	Remform 8x65	4



Frame | Dynamic bed extension (option) 1/4 from year of construction 04/2010

Dynamic bed extension for lying surface 90 cm (option),
from year of construction 04/2010; BG2516-04

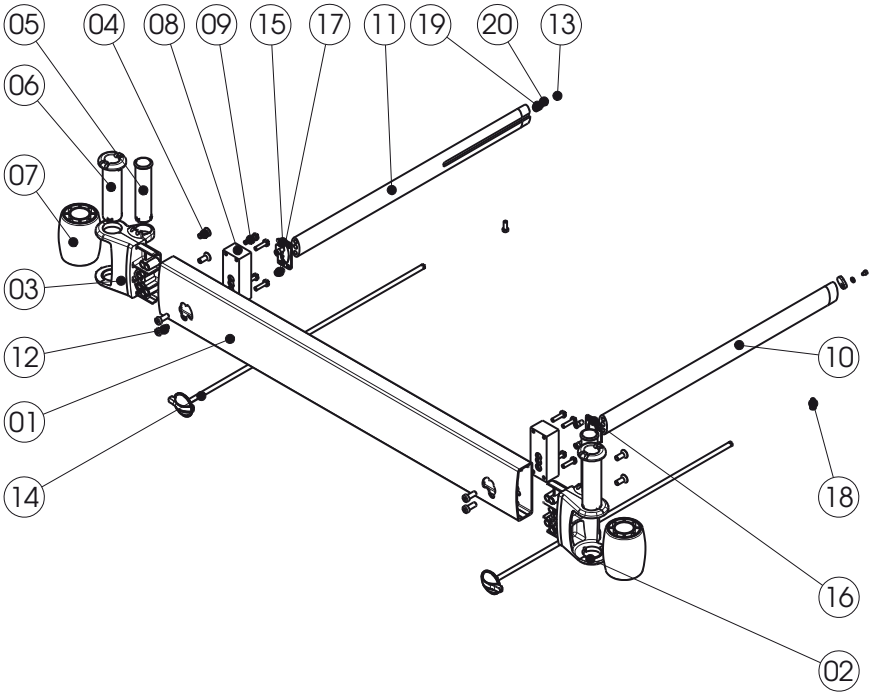
Item	Art. No.	Article	Qty
01	AP2675-03	Dynamic bed extension, foot panel	1
02	F2860-02	Foot panel corner piece, right	1
03	F2861-02	Foot panel corner piece, left	1
04	SR490	Countersunk screw M8x20	4
05	KT2030	Drip holder insertion sleeve	2
06	KT2031-01	Corner piece insertion sleeve	2
07	KT2029	Spacing roll	2
08	AP2673-02	Guide profile, right	1
09	AP2674-02	Guide profile, left	1
10	SR748	Thread tapping screw M8x25	4
11	SR312	Cylinder head screw M4x6	2
12	BG2524-03	Unlocking set	1
13	KT2683	Closing plate, left	1
14	KT2682	Closing plate, right	1
15	SR372	Taptite M8x16	4
16	SR2456	Cylinder head screw M6x14	2
17	F2863-01	Locking lever	2
18	SR2052	Washer	2



Frame | Dynamic bed extension (option) 2/4 from year of construction 04/2010

Dynamic bed extension for lying surface 100 cm (option),
from year of construction 04/2010; BG2967-02

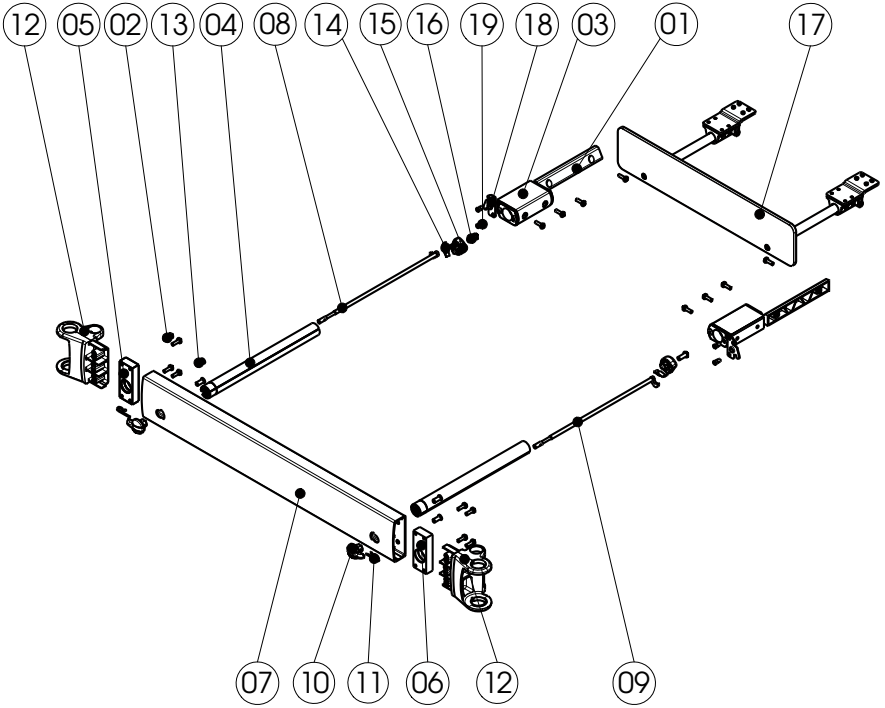
Item	Art. No.	Article	Qty
01	AP2994-01	Dynamic bed extension, foot panel	1
02	F2860-02	Foot panel corner piece, right	1
03	F2861-02	Foot panel corner piece, left	1
04	SR490	Countersunk screw M8x20	4
05	KT2030	Drip holder insertion sleeve	2
06	KT2031-01	Corner piece insertion sleeve	2
07	KT2029	Spacing roll	2
08	F2969-02	Bearing block	2
09	SR467	Thread tapping screw M6x25	8
10	AP2673-02	Guide profile, right	1
11	AP2674-02	Guide profile, left	1
12	SR466	Thread tapping screw M8x20	4
13	SR312	Cylinder head screw M4x6	2
14	BG2524-03	Unlocking set	1
15	KT2683	Closing plate, left	1
16	KT2682	Closing plate, right	1
17	SR372	Taptite M8x16	4
18	SR2456	Cylinder head screw M6x14	2
19	F2863-01	Locking lever	2
20	SR2052	Washer	2



Frame | Dynamic bed extension (option) 3/4 to year of construction 03/2010

Dynamic bed extension for lying surface 90 cm (option),
to year of construction 03/2010; BG360-02

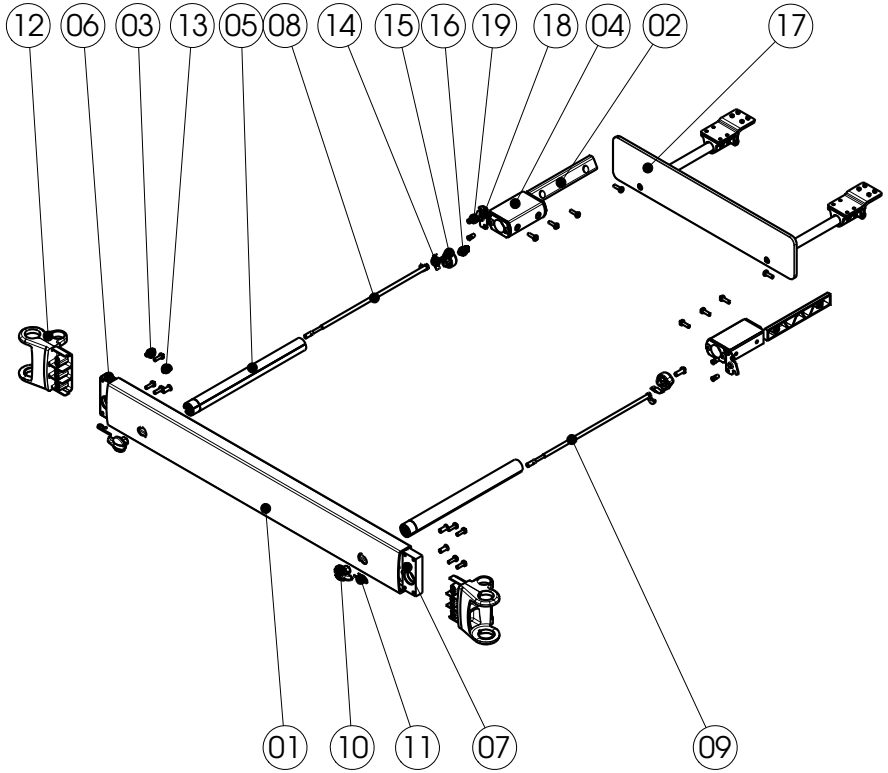
Item	Art. No.	Article	Qty
01	KT247-01	Bed extension limit stop	2
02	SR2213	Thread tapping screw M6x20	16
03	BG2259	Linear guide	2
04	AP922-02	Guide profile	2
05	F1506	Bearing block, left	1
06	F1298-01	Bearing block, right	1
07	AP923	Foot panel profile	1
08	F2398-01	Locking lever, left	1
09	F2399-01	Locking lever, right	1
10	KT2147-01	Release button	2
11	FE011	Insertion spring	2
12	F2070	Foot panel corner piece	2
13	SR490	Countersunk screw M8x20	4
14	FE2004-01	Release spring	2
15	KT2126	Guide cap	2
16	SR2210	Flat–headed screw M8x22	2
17	BG1190-01	Foot section extension	1
18	KT2136	Closing plate	2
19	SR372	Taptite M8x16	4



Frame | Dynamic bed extension (option) 4/4 to year of construction 03/2010

Dynamic bed extension for lying surface 100 cm (option),
to year of construction 03/2010; BG3428

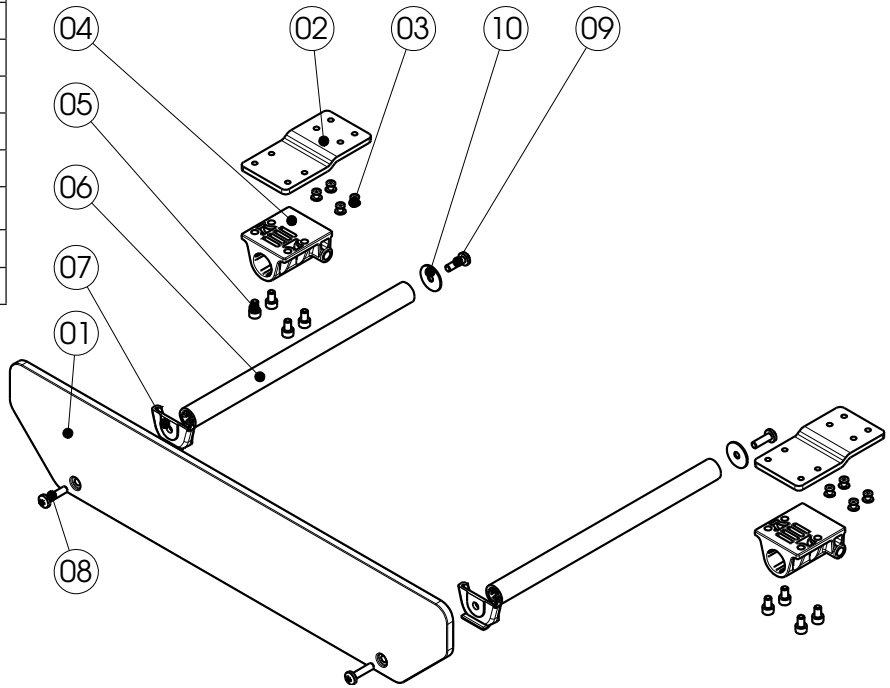
Item	Art. No.	Article	Qty
01	AP924	Foot panel profile	1
02	KT247-01	Bed extension limit stop	2
03	SR2213	Thread tapping screw M6x20	16
04	BG2259	Linear guide	2
05	AP922-02	Guide profile	2
06	F1506	Bearing block, left	1
07	F1298-01	Bearing block, right	1
08	F2398-01	Locking lever, left	1
09	F2399-01	Locking lever, right	1
10	KT2147-01	Release button	2
11	FE011	Insertion spring	2
12	F2070	Foot panel corner piece	2
13	SR490	Countersunk screw M8x20	4
14	FE2004-01	Release spring	2
15	KT2126	Guide cap	2
16	SR2210	Flat–headed screw M8x22	2
17	BG1190-01	Foot section extension	1
18	KT2136	Closing plate	2
19	SR372	Taptite M8x16	4



Frame | Foot section extension (option) 1/2 from year of construction 04/2010

Foot section extension (option), from year of construction 04/2010;
BG1151-05

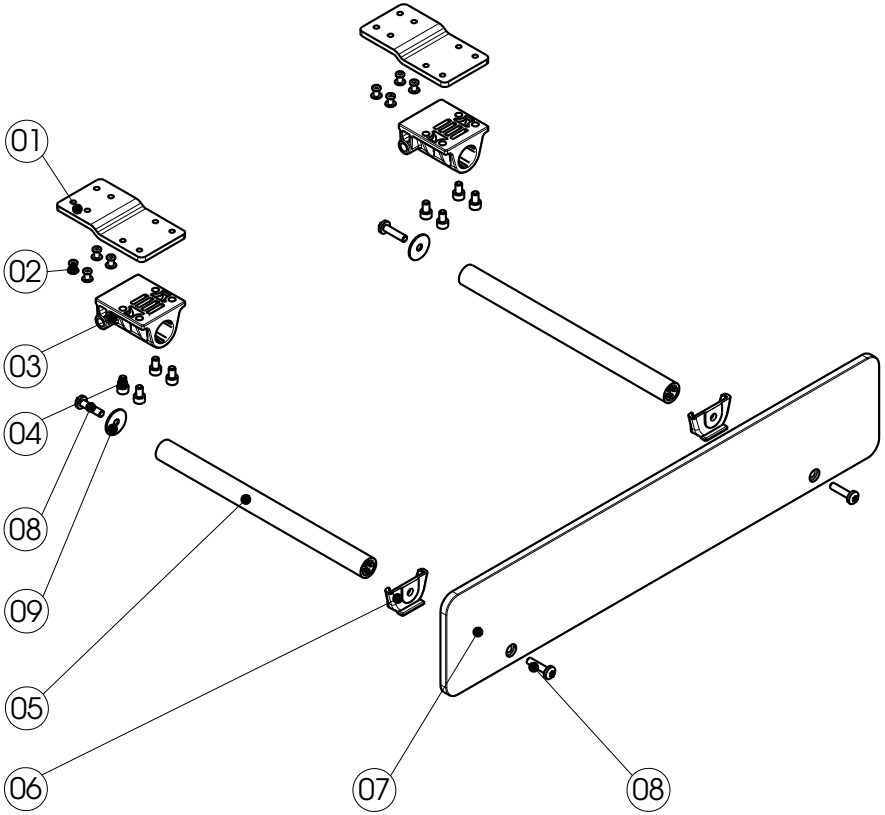
Item	Art. No.	Article	Qty
01	HPL2163-01	Foot section connection	1
02	F2189-01	Extension plate	2
03	SR2161	Blind rivet 4.8x12	8
04	KT2094	Bed linen storage area, guide	2
05	SR2158	Cylinder head screw M6x10	8
06	AP2253-02	Bed linen storage area, guide tube	2
07	KT2121-01	Guide latch	2
08	SR2214	Thread tapping screw M6x25	2
09	SR2213	Thread tapping screw M6x20	2
10	SR2097	Fender disk 6.4x25x1.25	2



Frame | Foot section extension (option) 2/2 to year of construction 03/2010

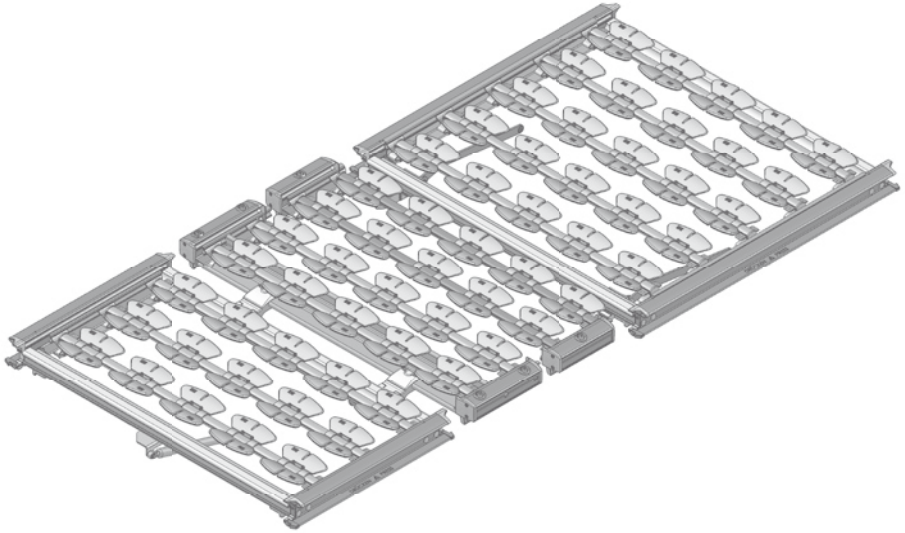
Foot section extension (option), to year of construction 03/2010;
BG1190-01

Item	Art. No.	Article	Qty
01	F2189-01	Extension plate	2
02	SR392	Blind rivet 4.8x12	8
03	KT2094	Bed linen storage area, guide	2
04	SR2117	Cylinder head screw M6x10	8
05	AP2253	Guide tube	2
06	KT2121-01	Guide latch	2
07	HPL2163	Foot section connection	1
08	SR2214	Thread tapping screw M6x25	4
09	SR2097	Fender disk 6.4x25x1.25	2



Lying surface

This section contains exploded views and assembly parts lists which are divided into corresponding individual parts.



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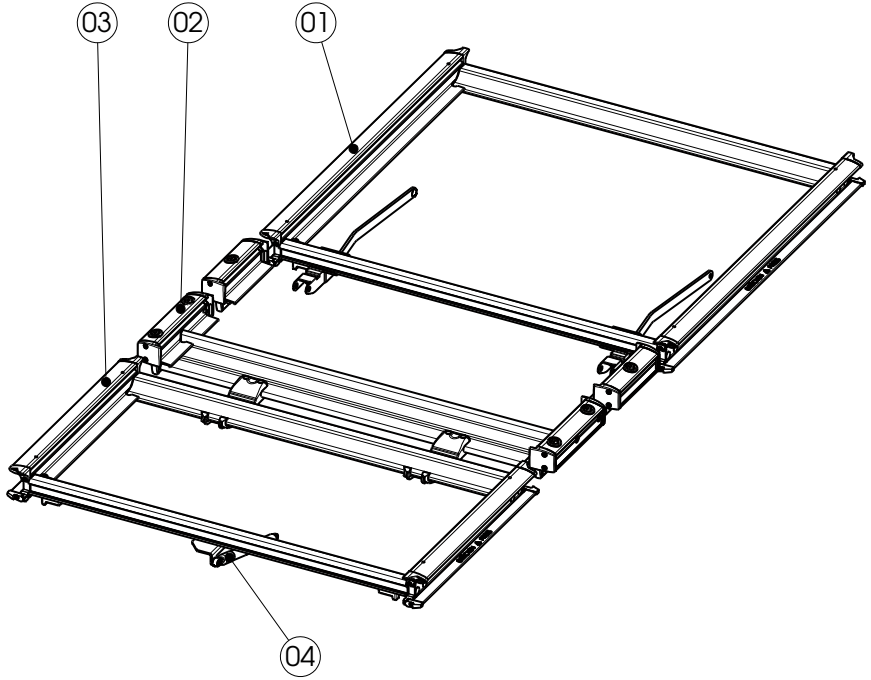
Lying surface | Lying surface frame

Lying surface frame for lying surface 200x90 cm;
BG2643

Item	Art. No.	Article	Qty
01	BG2640	Lying surface, back section	1
02	BG2645	Lying surface, upper leg/ seat section	1
03	BG2646-01	Lying surface, lower leg section	1
04	BG353	Hydrolift adjustment	1



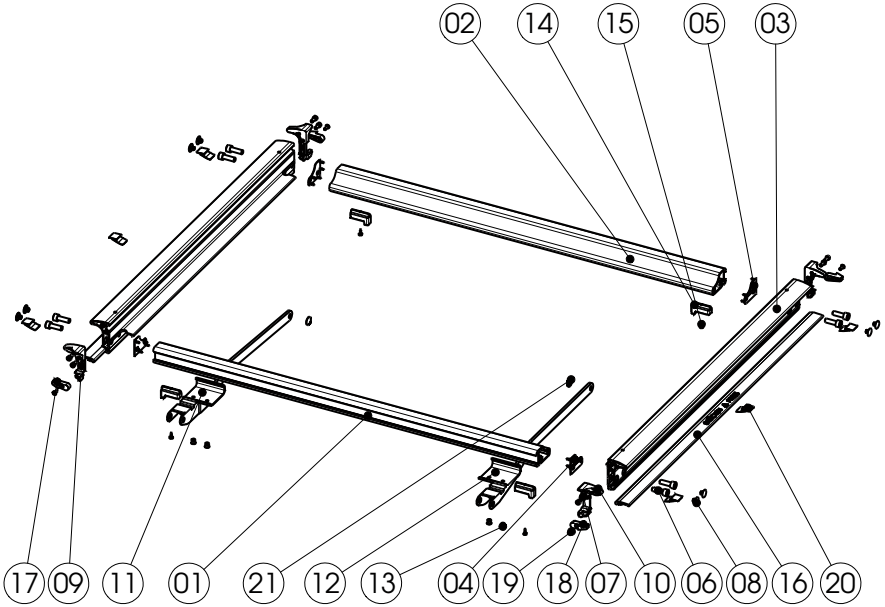
Lying surface frame variants

Width	Designation	200	210
90	Complete BG	BG2643	BG2881
	Back section	BG2640	
	Upper leg/ Seat section	BG2645	
	Lower leg section	BG2646-01	BG2884-01
	Hydrolift adjustment	BG353	BG2892
100	Complete BG	BG2882	BG2883
	Back section	BG3226	
	Upper leg/ Seat section	BG2887	
	Lower leg section	BG2885-01	BG2886-01
	Hydrolift adjustment	BG353	BG2892

Lying surface | Lying surface frame | Back section 1/2

Back section for lying surface 200-210x90 cm;
BG2640

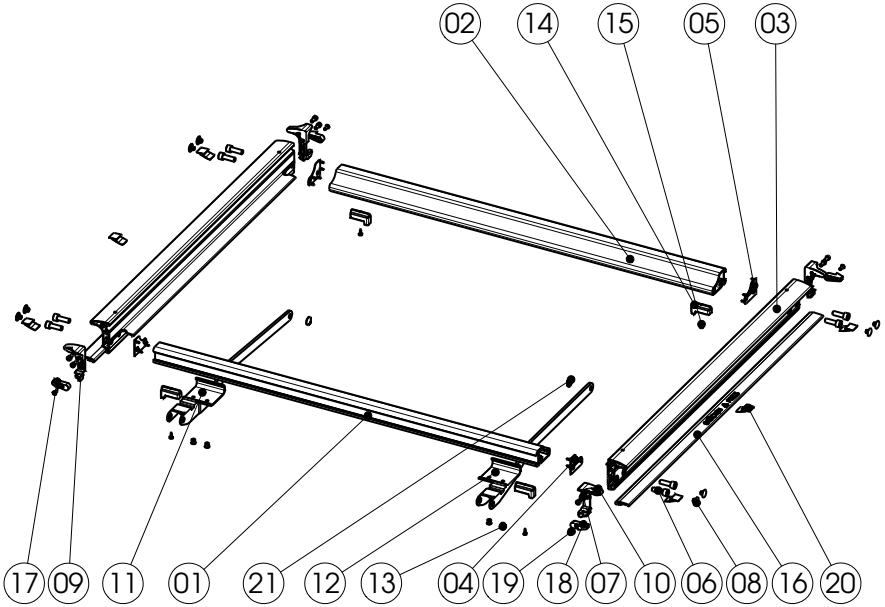
Item	Art. No.	Article	Qty
01	AP2904-01	Frame cross profile, back section	1
02	AP354	Frame cross profile, back section	1
03	AP2269-01	Frame longitudinal profile, back section	2
04	KT195-01	Form disk, left	2
05	KT201-01	Form disk, right	2
06	SR748	Thread tapping screw M8x25	8
07	SR749	Thread tapping screw M5x12	8
08	KT300	Plug	8
09	KT1172	Frame longitudinal profile cap, right	2
10	KT1173	Frame longitudinal profile cap, left	2
11	BG2552-02	Mattress retraction, left	1
12	BG2551-02	Mattress retraction, right	1
13	SR752	Blind rivet 4.8x10	4
14	KT1198	Slide	4
15	SR2013	Fillister head sheet metal screw 3.9x13	4
16	AP357	Release profile, back section	2
17	F1199	Catch, right	2
18	F1200	Catch, left	2
19	SR128	Thread tapping screw M4x12	4
20	FE1300-01	Release spring	6
21	SR378	Locking washer	2



Lying surface | Lying surface frame | Back section 2/2

Back section for lying surface 200-210x100 cm;
BG3226

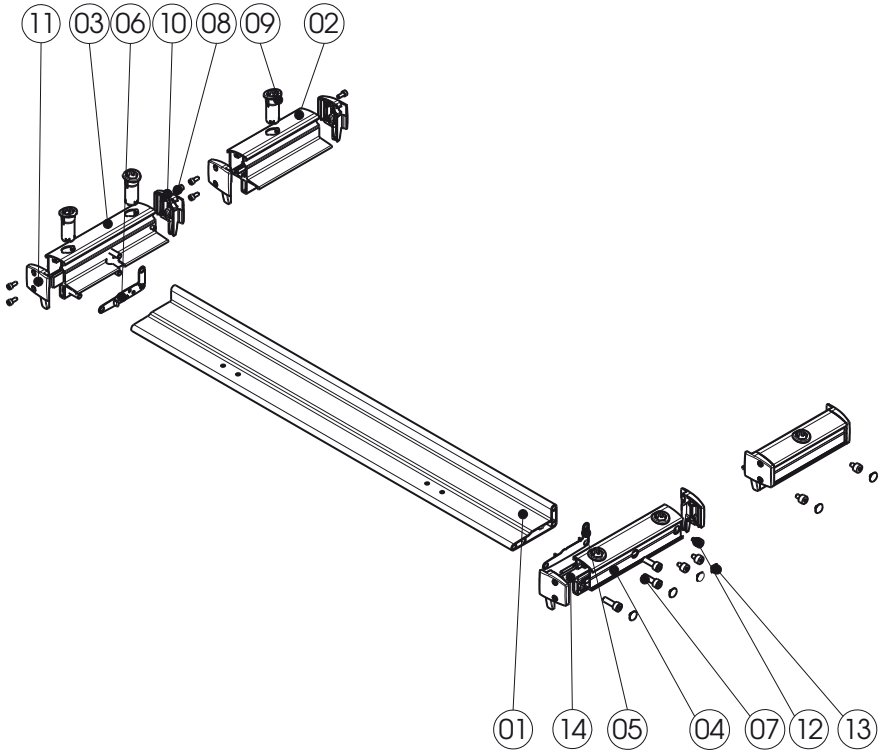
Item	Art. No.	Article	Qty
01	AP2895-01	Frame cross profile, back section	1
02	AP342	Frame cross profile, back section	1
03	AP2269-01	Frame longitudinal profile, back section	2
04	KT195-01	Form disk, left	2
05	KT201-01	Form disk, right	2
06	SR748	Thread tapping screw M8x25	8
07	SR749	Thread tapping screw M5x12	8
08	KT300	Plug	8
09	KT1172	Frame longitudinal profile cap, right	2
10	KT1173	Frame longitudinal profile cap, left	2
11	BG2552-02	Mattress retraction, left	1
12	BG2551-02	Mattress retraction, right	1
13	SR752	Blind rivet 4.8x10	4
14	KT1198	Slide	4
15	SR2013	Fillister head sheet metal screw 3.9x13	4
16	AP357	Release profile, back section	2
17	F1199	Catch, right	2
18	F1200	Catch, left	2
19	SR128	Thread tapping screw M4x12	4
20	FE1300-01	Release spring	6
21	SR378	Locking washer	2



Lying surface | Lying surface frame | Upper leg/Seat section 1/2

Upper leg/Seat section for lying surface 90 cm;
BG2645

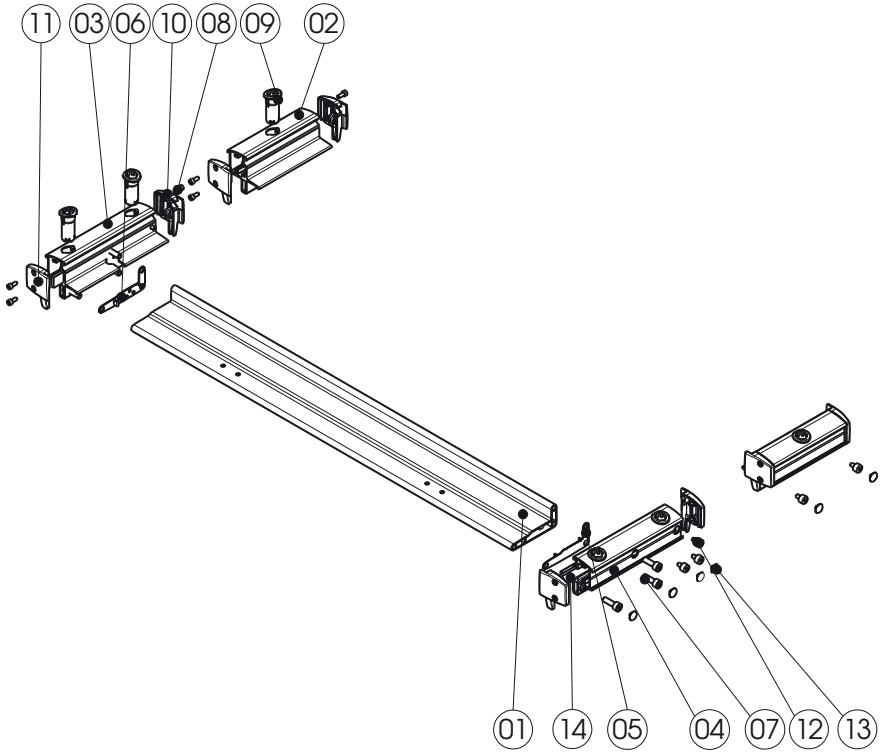
Item	Art. No.	Article	Qty
01	AP1004	Frame cross profile, upper leg section	1
02	AP2274	Frame longitudinal profile, seat section	2
03	AP2276-01	Frame longitudinal profile, upper leg section, right	1
04	AP2275-01	Frame longitudinal profile, upper leg section, left	1
05	KT2276	Form disk, upper leg section, right	1
06	KT2277	Form disk, upper leg section, left	1
07	SR748	Thread tapping screw M8x25	6
08	SR749	Thread tapping screw M5x12	16
09	KT242	Receptacle	6
10	KT1178	Cap, right	4
11	KT1179	Cap, left	4
12	SR2192	Thread tapping screw M6x10	10
13	KT298	Plug	12
14	F2308	Strengthening link plate for upper leg section	2



Lying surface | Lying surface frame | Upper leg/Seat section 2/2

Upper leg/Seat section for lying surface 100 cm;
BG2887

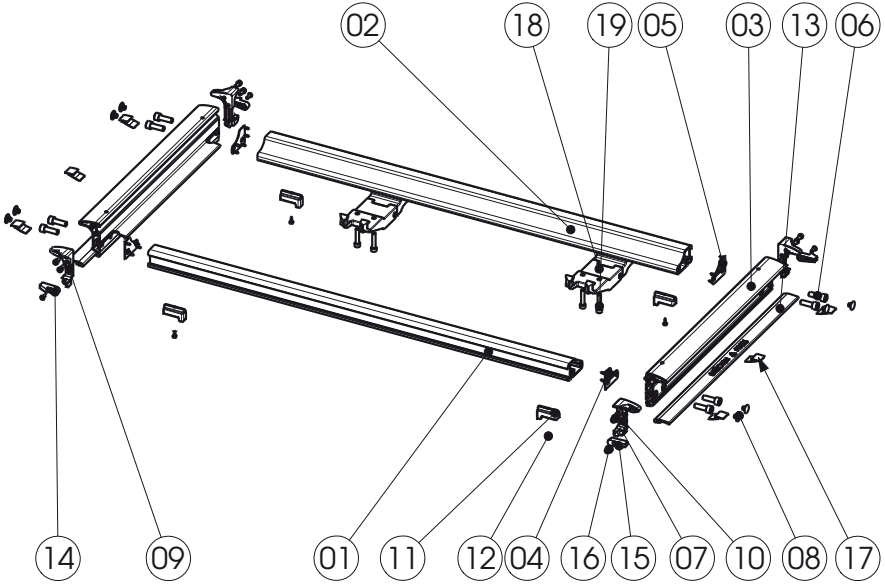
Item	Art. No.	Article	Qty
01	AP1053	Frame cross profile, upper leg section	1
02	AP2274	Frame longitudinal profile, seat section	2
03	AP2276-01	Frame longitudinal profile, upper leg section, right	1
04	AP2275-01	Frame longitudinal profile, upper leg section, left	1
05	KT2276	Form disk, upper leg section, right	1
06	KT2277	Form disk, upper leg section, left	1
07	SR748	Thread tapping screw M8x25	6
08	SR749	Thread tapping screw M5x12	16
09	KT242	Receptacle	6
10	KT1178	Cap, right	4
11	KT1179	Cap, left	4
12	SR2192	Thread tapping screw M6x10	10
13	KT298	Plug	12
14	F2308	Strengthening link plate for upper leg section	2



Lying surface | Lying surface frame | Lower leg section 1/4

Lower leg section for lying surface 190-200x90 cm;
BG2646-01

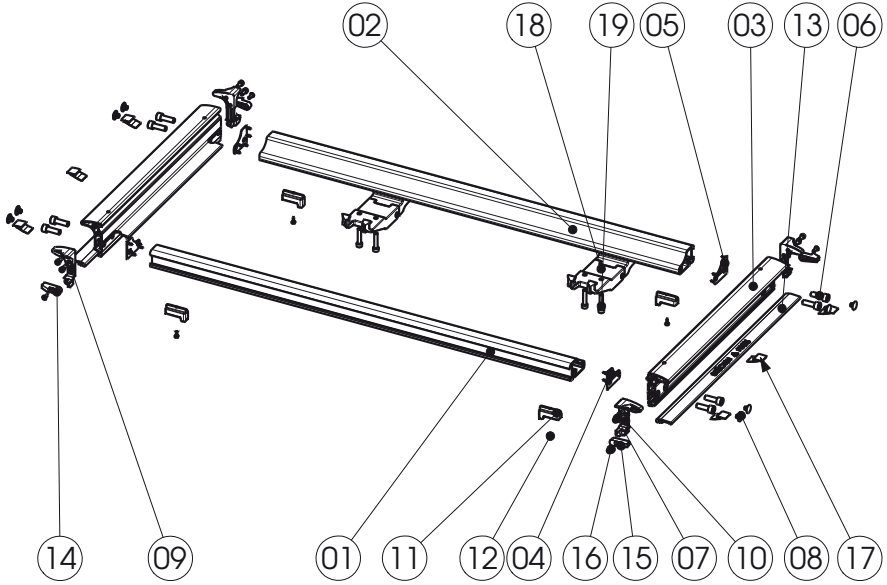
Item	Art. No.	Article	Qty
01	AP2328	Frame cross profile, lower leg section	1
02	AP989	Frame cross profile, lower leg section	1
03	AP2270-01	Frame longitudinal profile, lower leg section	2
04	KT195-01	Form disk, left	2
05	KT201-01	Form disk, right	2
06	SR748	Thread tapping screw M8x25	8
07	SR749	Thread tapping screw M5x12	8
08	KT300	Plug	8
09	KT1172	Frame longitudinal profile cap, right	2
10	KT1173	Frame longitudinal profile cap, left	2
11	KT1198	Slide	4
12	SR2013	Fillister head sheet metal screw 3.9x13	4
13	AP362	Release profile, lower leg section	2
14	F1199	Catch, right	2
15	F1200	Catch, left	2
16	SR128	Thread tapping screw M4x12	4
17	FE1300-01	Release spring	6
18	KT2263	Hinge band	2
19	SR747	Thread tapping screw M6x30	4



Lying surface | Lying surface frame | Lower leg section 2/4

Lower leg section for lying surface 210-220x90 cm;
BG2884-01

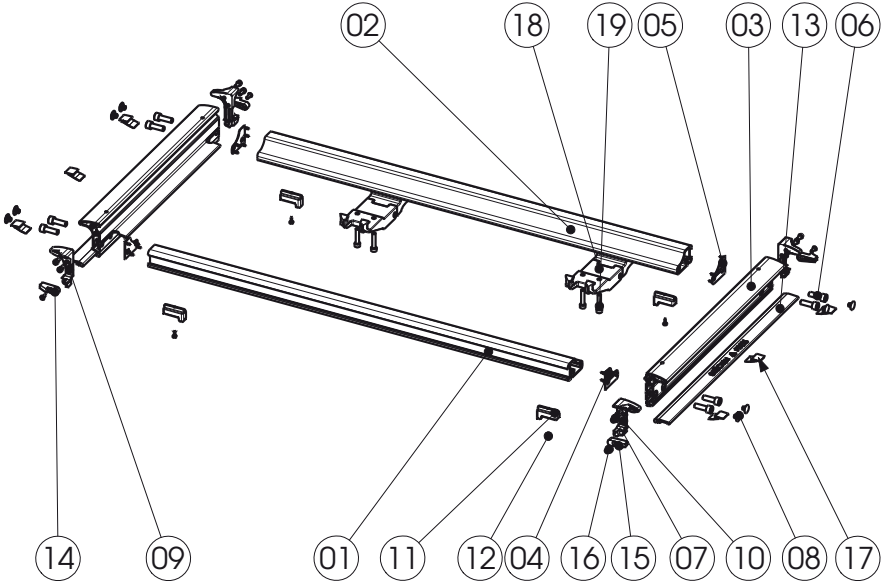
Item	Art. No.	Article	Qty
01	AP2328	Frame cross profile, lower leg section	1
02	AP989	Frame cross profile, lower leg section	1
03	AP2272-01	Frame longitudinal profile, lower leg section	2
04	KT195-01	Form disk, left	2
05	KT201-01	Form disk, right	2
06	SR748	Thread tapping screw M8x25	8
07	SR749	Thread tapping screw M5x12	8
08	KT300	Plug	8
09	KT1172	Frame longitudinal profile cap, right	2
10	KT1173	Frame longitudinal profile cap, left	2
11	KT1198	Slide	4
12	SR2013	Fillister head sheet metal screw 3.9x13	4
13	AP466	Release profile, lower leg section	2
14	F1199	Catch, right	2
15	F1200	Catch, left	2
16	SR128	Thread tapping screw M4x12	4
17	FE1300-01	Release spring	6
18	KT2263	Hinge band	2
19	SR747	Thread tapping screw M6x30	4



Lying surface | Lying surface frame | Lower leg section 3/4

Lower leg section for lying surface 190-200x100 cm;
BG2885-01

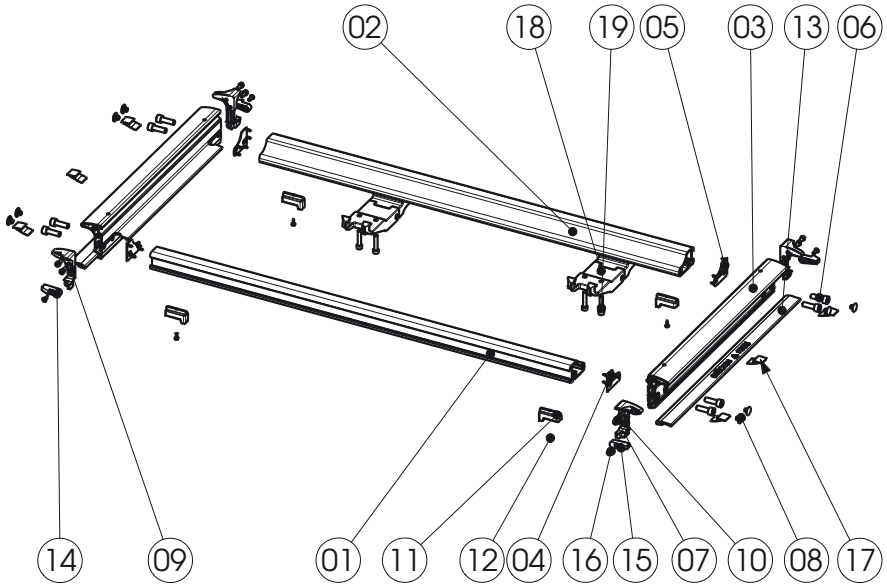
Item	Art. No.	Article	Qty
01	AP2935	Frame cross profile, lower leg section	1
02	AP1052	Frame cross profile, lower leg section	1
03	AP2270-01	Frame longitudinal profile, lower leg section	2
04	KT195-01	Form disk, left	2
05	KT201-01	Form disk, right	2
06	SR748	Thread tapping screw M8x25	8
07	SR749	Thread tapping screw M5x12	8
08	KT300	Plug	8
09	KT1172	Frame longitudinal profile cap, right	2
10	KT1173	Frame longitudinal profile cap, left	2
11	KT1198	Slide	4
12	SR2013	Fillister head sheet metal screw 3.9x13	4
13	AP362	Release profile, lower leg section	2
14	F1199	Catch, right	2
15	F1200	Catch, left	2
16	SR128	Thread tapping screw M4x12	4
17	FE1300-01	Release spring	6
18	KT2263	Hinge band	2
19	SR747	Thread tapping screw M6x30	4



Lying surface | Lying surface frame | Lower leg section 4/4

Lower leg section for lying surface 210-220x100 cm;
BG2886-01

Item	Art. No.	Article	Qty
01	AP2935	Frame cross profile, lower leg section	1
02	AP1052	Frame cross profile, lower leg section	1
03	AP2272-01	Frame longitudinal profile, lower leg section	2
04	KT195-01	Form disk, left	2
05	KT201-01	Form disk, right	2
06	SR748	Thread tapping screw M8x25	8
07	SR749	Thread tapping screw M5x12	8
08	KT300	Plug	8
09	KT1172	Frame longitudinal profile cap, right	2
10	KT1173	Frame longitudinal profile cap, left	2
11	KT1198	Slide	4
12	SR2013	Fillister head sheet metal screw 3.9x13	4
13	AP466	Release profile, lower leg section	2
14	F1199	Catch, right	2
15	F1200	Catch, left	2
16	SR128	Thread tapping screw M4x12	4
17	FE1300-01	Release spring	6
18	KT2263	Hinge band	2
19	SR747	Thread tapping screw M6x30	4



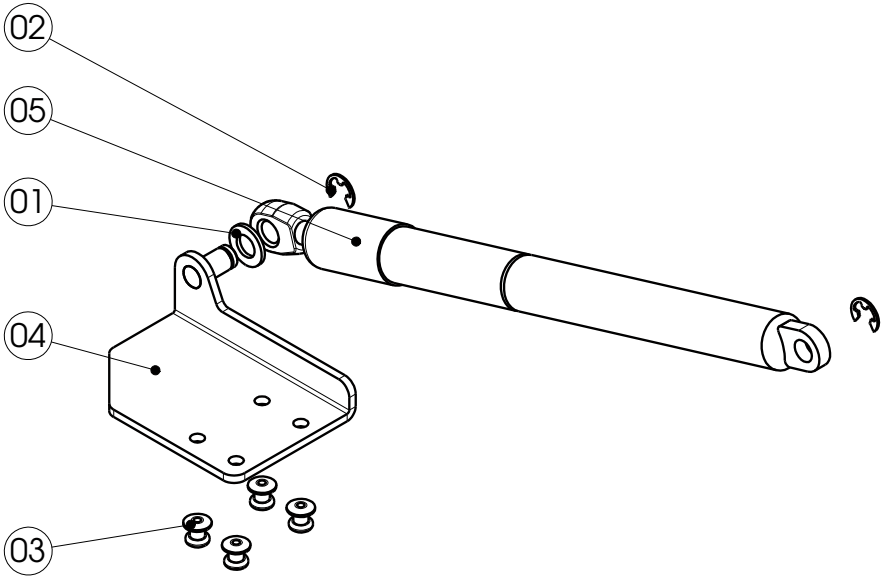
Lying surface | Lying surface frame | Hydrolift adjustment

Hydrolift adjustment for lying surface 190-200 cm;
BG353

Item	Art. No.	Article	Qty
01	KT118	Plastic washer Ø8.4xØ15x1.5	1
02	SR162	Locking washer	2
03	SR632	Blind rivet 4.8x10	4
04	F1273	Pneumatic spring holder	1
05	BG1318	Hydrolift with drop groove	1

Hydrolift adjustment for lying surface 210-220 cm;
BG2892

Item	Art. No.	Article	Qty
01	KT118	Plastic washer Ø8.4xØ15x1.5	1
02	SR162	Locking washer	2
03	SR632	Blind rivet 4.8x10	4
04	F1274	Pneumatic spring holder	1
05	BG1318	Hydrolift with drop groove	1



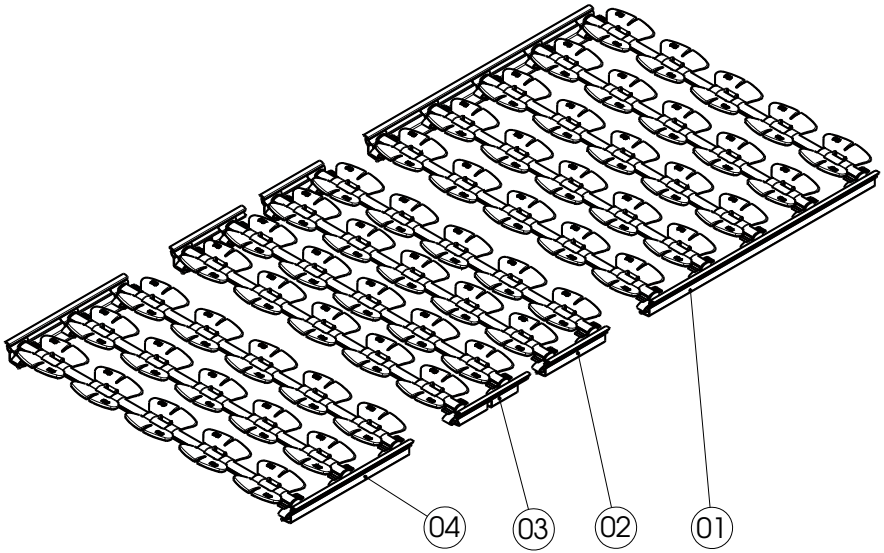
Lying surface | MiS lying surface

MiS lying surface for lying surface 200x90 cm;
BG1280

Item	Art. No.	Article	Qty
01	BG1214	MiS lying surface, back section	1
02	BG1269	MiS lying surface, seat section	1
03	BG1270	MiS lying surface, upper leg section	1
04	BG1215	MiS lying surface, lower leg section	1

MiS lying surface, variants

Width	Designation	200	210
90	Complete BG	BG1280	BG1424
	Back section	BG1214	
	Seat section	BG1269	
	Upper leg section	BG1270	
	Lower leg section	BG1215	BG1217
100	Complete BG	BG1427	BG1428
	Back section	BG1271	
	Seat section	BG1277	
	Upper leg section	BG1278	
	Lower leg section	BG1272	BG1274



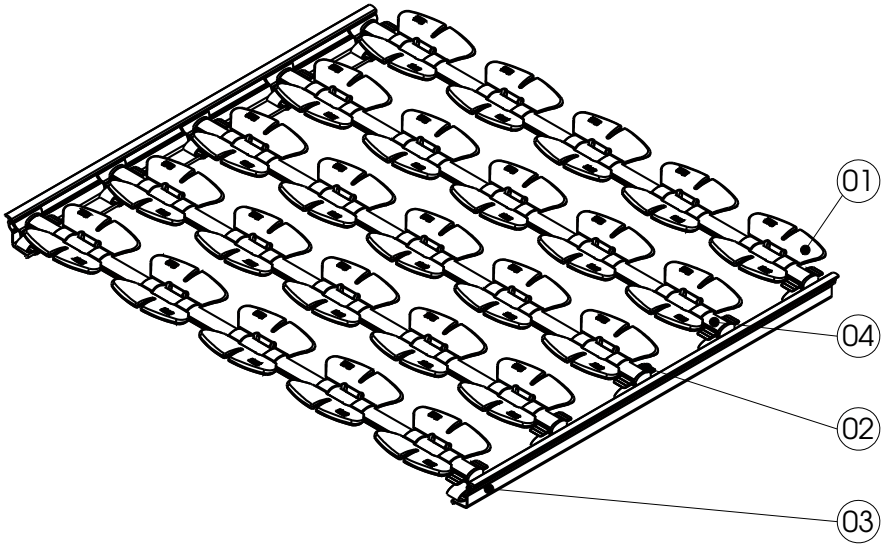
Lying surface | MiS lying surface | Back section

Back section for lying surface 200-210x90 cm;
BG1214

Item	Art. No.	Article	Qty
01	KT1224	Wing	25
02	KT2166-01	Spring element with detent	10
03	KT2181-01	Lying surface profile	2
04	KT2186	Supporting profile	5

Back section for lying surface 200-210x100 cm;
BG1271

Item	Art. No.	Article	Qty
01	KT1224	Wing	25
02	KT2166-01	Spring element with detent	10
03	KT2181-01	Lying surface profile, back section	2
04	KT2227	Supporting profile	5



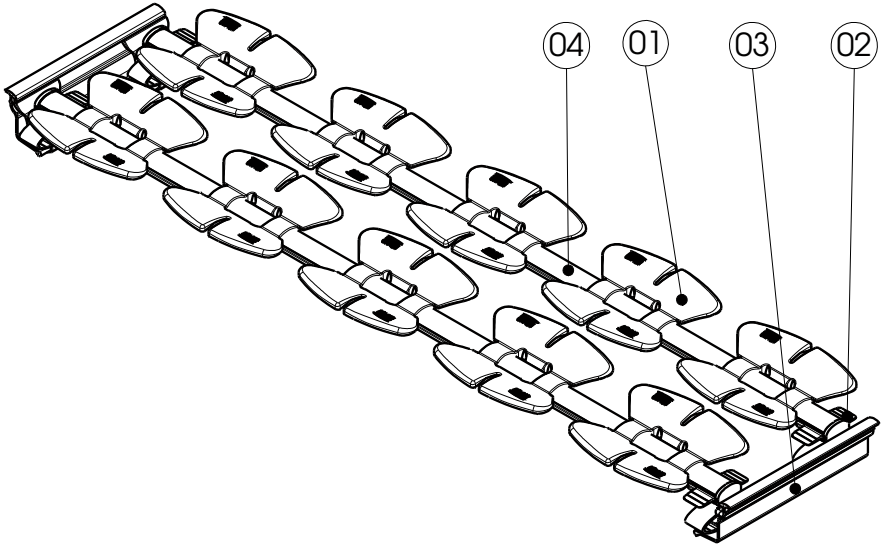
Lying surface | MiS lying surface | Seat section

Seat section for lying surface 90 cm;
BG1269

Item	Art. No.	Article	Qty
01	KT1224	Wing	10
02	KT2166-01	Spring element with detent	4
03	KT2221	Lying surface profile	2
04	KT2226	Supporting profile	2

Seat section for lying surface 100 cm;
BG1277

Item	Art. No.	Article	Qty
01	KT1224	Wing	10
02	KT2166-01	Spring element with detent	4
03	KT2221	Lying surface profile, seat section	2
04	KT2227	Supporting profile	2



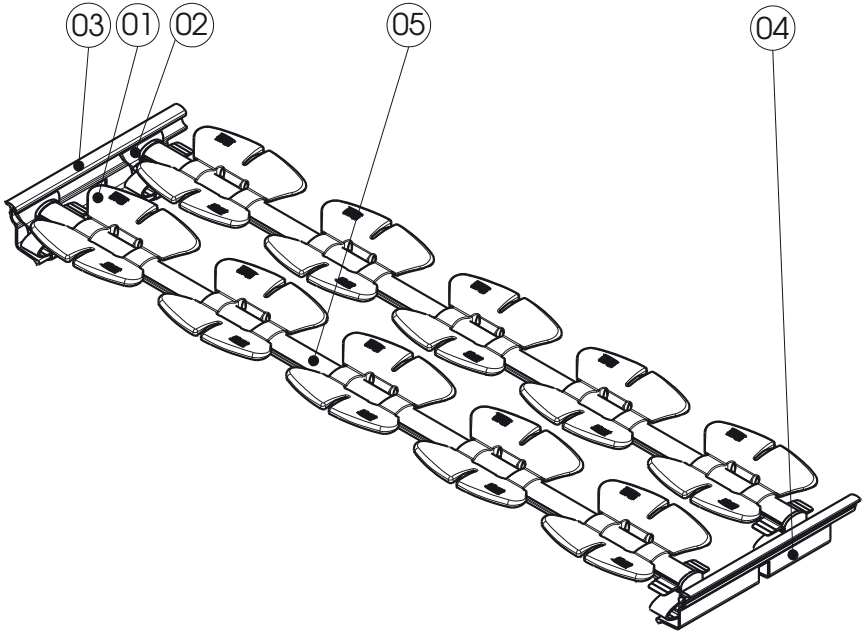
Lying surface | MiS lying surface | Upper leg section

Upper leg section for lying surface 90 cm;
BG1270

Item	Art. No.	Article	Qty
01	KT1224	Wing	10
02	KT2166-01	Spring element with detent	4
03	KT2223-01	Lying surface profile	1
04	KT2222-01	Lying surface profile	1
05	KT2186	Supporting profile	2

Upper leg section for lying surface 100 cm;
BG1278

Item	Art. No.	Article	Qty
01	KT1224	Wing	10
02	KT2166-01	Spring element with detent	4
03	KT2222-01	Lying surface profile, upper leg section, left	1
04	KT2223-01	Lying surface profile, upper leg section, right	1
05	KT2227	Supporting profile	2



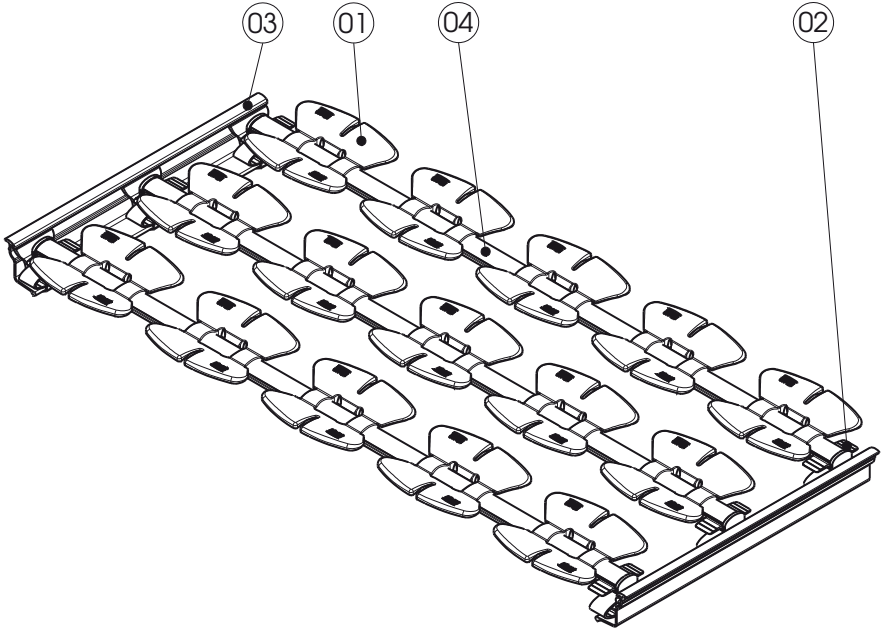
Lying surface | MiS lying surface | Lower leg section 1/2

Lower leg section for lying surface 200x90 cm;
BG1215

Item	Art. No.	Article	Qty
01	KT1224	Wing	15
02	KT2166-01	Spring element with detent	6
03	KT2182	Lying surface profile	2
04	KT2186	Supporting profile	3

Lower leg section for lying surface 210x90 cm;
BG1217

Item	Art. No.	Article	Qty
01	KT1224	Wing	15
02	KT2166-01	Spring element with detent	6
03	KT2184	Lying surface profile, foot section	2
04	KT2186	Supporting profile	3



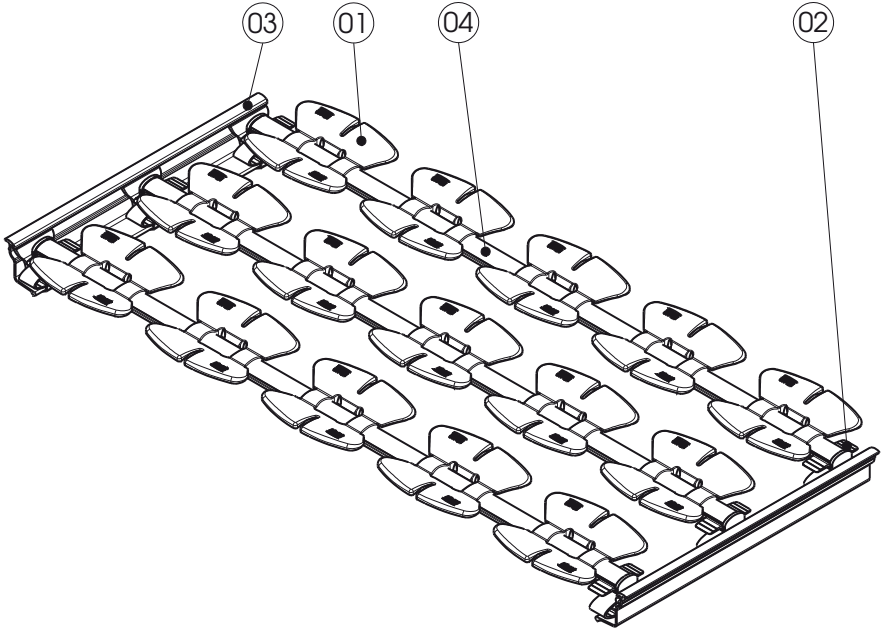
Lying surface | MiS lying surface | Lower leg section 2/2

Lower leg section for lying surface 200x100 cm;
BG1272

Item	Art. No.	Article	Qty
01	KT1224	Wing	15
02	KT2166-01	Spring element with detent	6
03	KT2182	Lying surface profile, foot section	2
04	KT2227	Supporting profile	3

Lower leg section for lying surface 210x100 cm;
BG1274

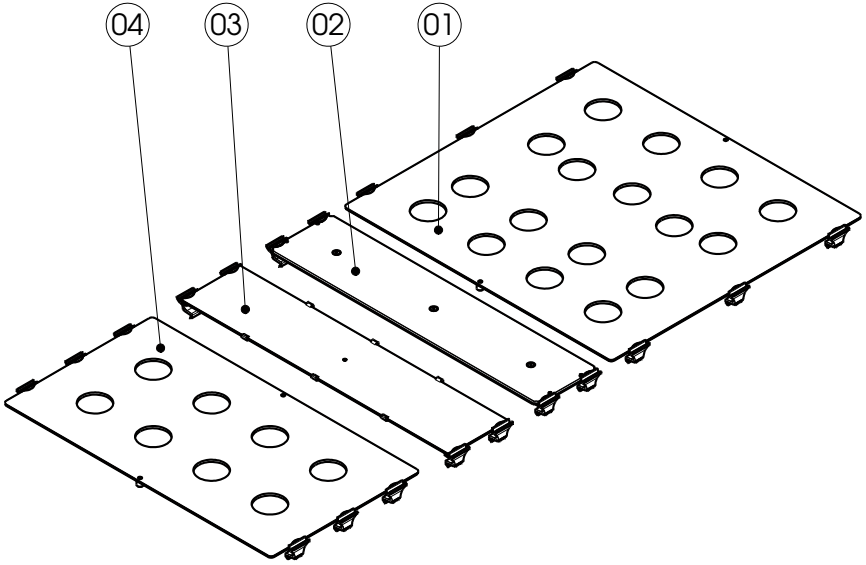
Item	Art. No.	Article	Qty
01	KT1224	Wing	15
02	KT2166-01	Spring element with detent	6
03	KT2184	Lying surface profile, foot section	2
04	KT2227	Supporting profile	3



Lying surface | HPL lying surface (variant)

HPL lying surface for lying surface 200x90 cm;
BG3313

Item	Art. No.	Article	Qty
01	BG1533-01	HPL lying surface, back section	1
02	BG3306	HPL lying surface, seat section	1
03	BG1534-01	HPL lying surface, upper leg section	1
04	BG1536-01	HPL lying surface, lower leg section	1



HPL lying surface, variants

Width	Designation	200	210
90	Complete BG	BG3313	BG3314
	Back section	BG1533-01	
	Seat section	BG3306	
	Upper leg section	BG1534-01	
	Lower leg section	BG1536-01	BG2038-01
100	Complete BG	BG3317	BG3318
	Back section	BG1871-01	
	Seat section	BG3307	
	Upper leg section	BG1872-01	
	Lower leg section	BG1873-01	BG2037-01

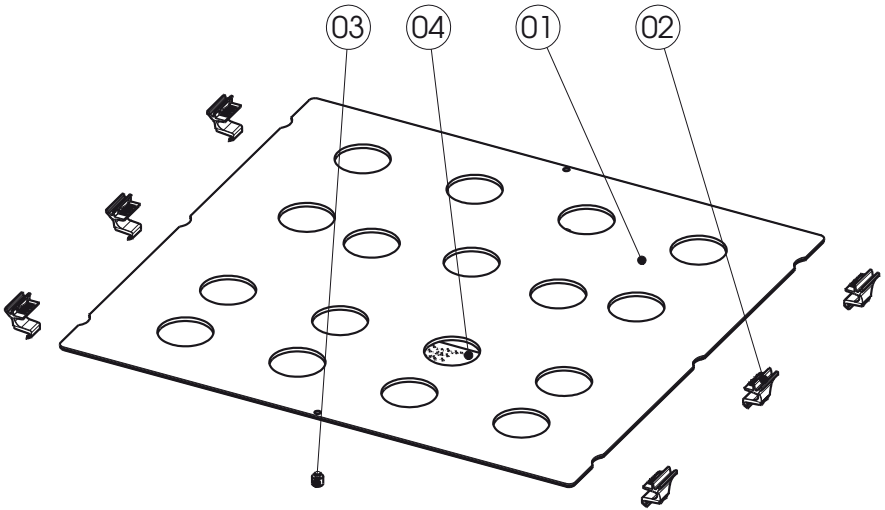
Lying surface | HPL lying surface (variant) | Back section

Back section for lying surface 200-210x90 cm;
BG1533-01

Item	Art. No.	Article	Qty
01	HPL295	HPL plate, back section	1
02	KT2308	Support	6
03	KT345	Support bolt	2
04	T009	Adhesive label	1

Back section for lying surface 200-210x100 cm;
BG1871-01

Item	Art. No.	Article	Qty
01	HPL339	HPL plate, back section	1
02	KT2308	Support	6
03	KT345	Support bolt	2
04	T009	Adhesive label	1



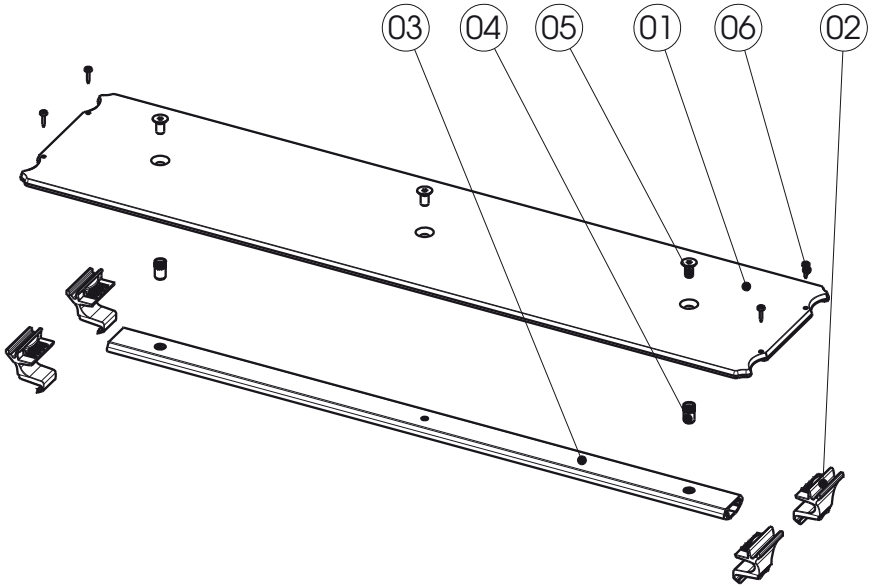
Lying surface | HPL lying surface (variant) | Seat section

Seat section for lying surface 90 cm;
BG3306

Item	Art. No.	Article	Qty
01	HPL296-01	HPL plate, seat section	1
02	KT2308	Support	4
03	AP912-02	Reinforcement profile	1
04	SR227	Blind rivet nut M8x11x17	2
05	SR644	Countersunk screw M8x16	3
06	SR205	Sheet metal screw 3.9x16	4

Seat section for lying surface 10 cm;
BG3307

Item	Art. No.	Article	Qty
01	HPL3084-02	HPL plate, seat section	1
02	KT2308	Support	4
03	AP3126	Reinforcement profile	1
04	SR227	Blind rivet nut M8x11x17	2
05	SR644	Countersunk screw M8x16	3
06	SR205	Sheet metal screw 3.9x16	4



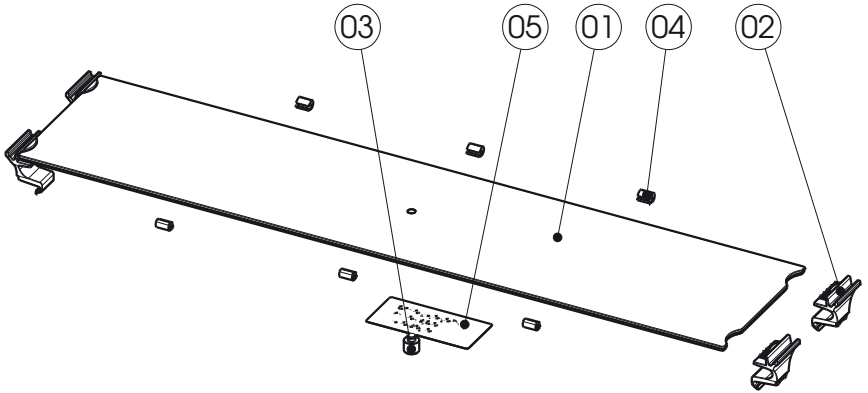
Lying surface | HPL lying surface (variant) | Upper leg section

Upper leg section for lying surface 90 cm;
BG1534-01

Item	Art. No.	Article	Qty
01	HPL297	HPL plate, upper leg section	1
02	KT2308	Support	4
03	KT345	Support bolt	1
04	KT1197	Clip	6
05	T006	Adhesive label	1

Upper leg section for lying surface 100 cm;
BG1872-01

Item	Art. No.	Article	Qty
01	HPL340	HPL plate, upper leg section	1
02	KT2308	Support	4
03	KT345	Support bolt	1
04	KT1197	Clip	6
05	T006	Adhesive label	1



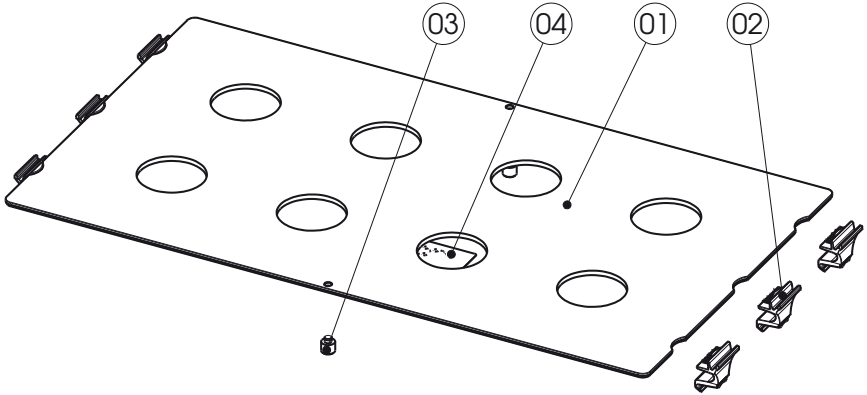
Lying surface | HPL lying surface (variant) | Lower leg section 1/2

Lower leg section for lying surface 190-200x90 cm;
BG1536-01

Item	Art. No.	Article	Qty
01	HPL298	HPL plate, lower leg section	1
02	KT2308	Support	6
03	KT345	Support bolt	2
04	T006	Adhesive label	1

Lower leg section for lying surface 190-200x100 cm;
BG2038-01

Item	Art. No.	Article	Qty
01	HPL342	HPL plate, lower leg section	1
02	KT2308	Support	6
03	KT345	Support bolt	2
04	T006	Adhesive label	1



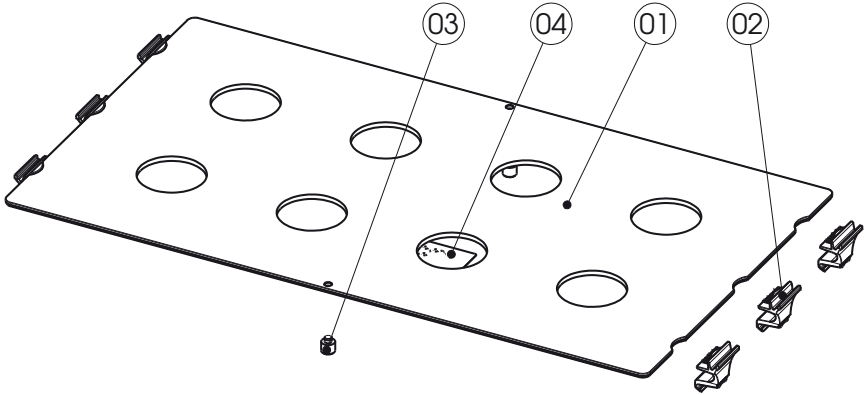
Lying surface | HPL lying surface (variant) | Lower leg section 2/2

Lower leg section for lying surface 210-220x90 cm;
BG1873-01

Item	Art. No.	Article	Qty
01	HPL341	HPL plate, lower leg section	1
02	KT2308	Support	6
03	KT345	Support bolt	2
04	T006	Adhesive label	1

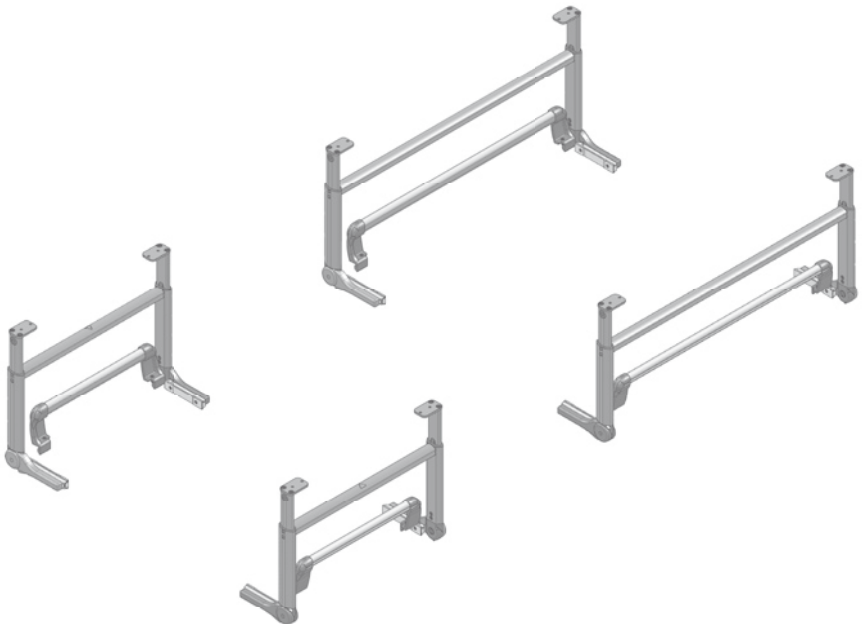
Lower leg section for lying surface 210-220x100 cm;
BG2037-01

Item	Art. No.	Article	Qty
01	HPL373	HPL plate, lower leg section	1
02	KT2308	Support	6
03	KT345	Support bolt	2
04	T006	Adhesive label	1



Side rails from year of construction 03/2010

This section contains exploded views and assembly parts lists which are divided into corresponding individual parts.



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- Lower leg section 🕮 92
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- Mattress holder, back section 🕮 101
- Mattress holder, lower leg section 🕮 102
- Clamp 🕮 103

Side rails from year of construction 03/2010 | Side rail set

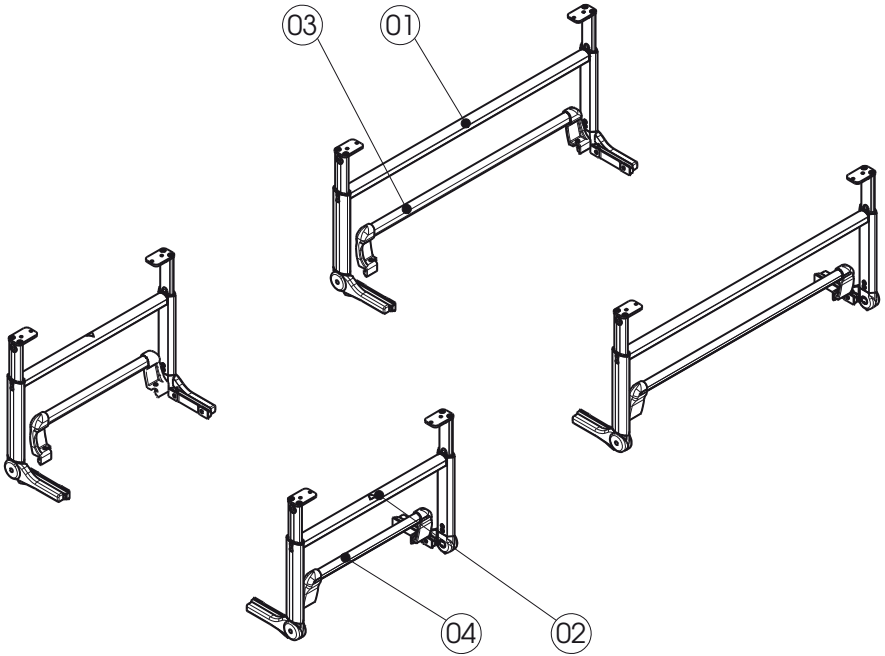
The side rails for the model S 962-2 are available in two heights: 34 cm (standard) and 40 cm (raised).

Side rail set
for lying surface 200 cm (height 34 cm),
from year of construction 03/2010; BG3039-01

Item	Art. No.	Article	Qty
01	BG2970-01	Side rails, back section	2
02	BG2975-01	Side rails, lower leg section	2
03	BG3034-01	Mattress holder, back section	2
04	BG3036-01	Mattress holder, lower leg section	2

Side rail set
for lying surface 210 cm (height 34 cm),
from year of construction 03/2010; BG3040-01

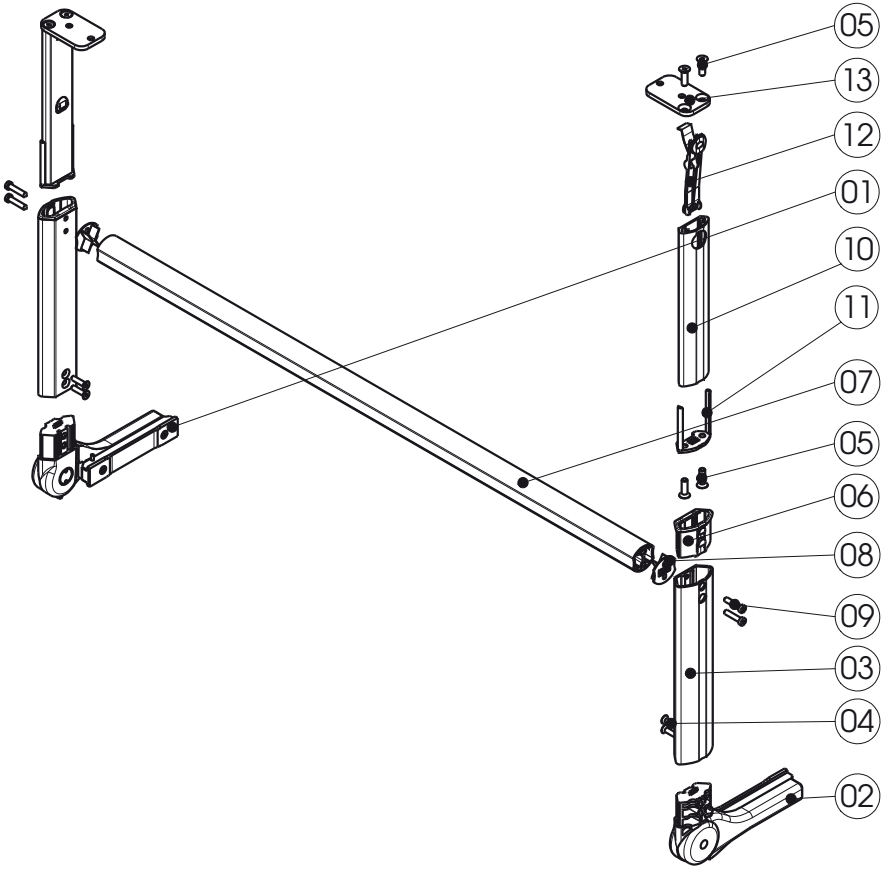
Item	Art. No.	Article	Qty
01	BG2970-01	Side rails, back section	2
02	BG2976-01	Side rails, lower leg section	2
03	BG3034-01	Mattress holder, back section	2
04	BG3037-01	Mattress holder, lower leg section	2



Side rails from year of construction 03/2010 | Side rail set | Back section

Side rails, back section
for lying surface 200-210 cm (height 34 cm),
from year of construction 03/2010; BG2970-01

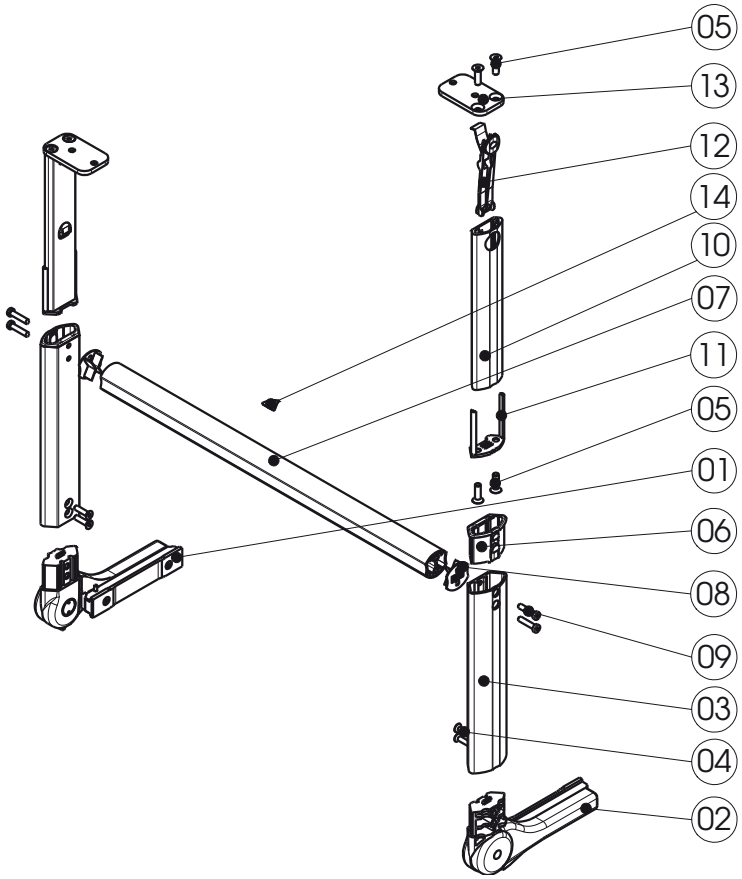
Item	Art. No.	Article	Qty
01	BG1212	Side rail joint, left	1
02	BG1211	Side rail joint, right	1
03	AP3005	Outer longitudinal profile	2
04	SR257	Thread tapping screw M5x20	4
05	SR751	Countersunk screw M6x20	8
06	KT1193-01	Guide, upper	2
07	AP3001	Cross profile, back section	1
08	KT2737	Cross profile form disk	2
09	SR2386	Cylinder head screw 4.8x25	4
10	AP3006	Inner longitudinal profile	2
11	KT2736	Guide, lower	2
12	BG3136	Release with slide-in spring	2
13	F1182	Hand rail plate	2



Side rails from year of construction 03/2010 | Side rail set | Lower leg section 1/2

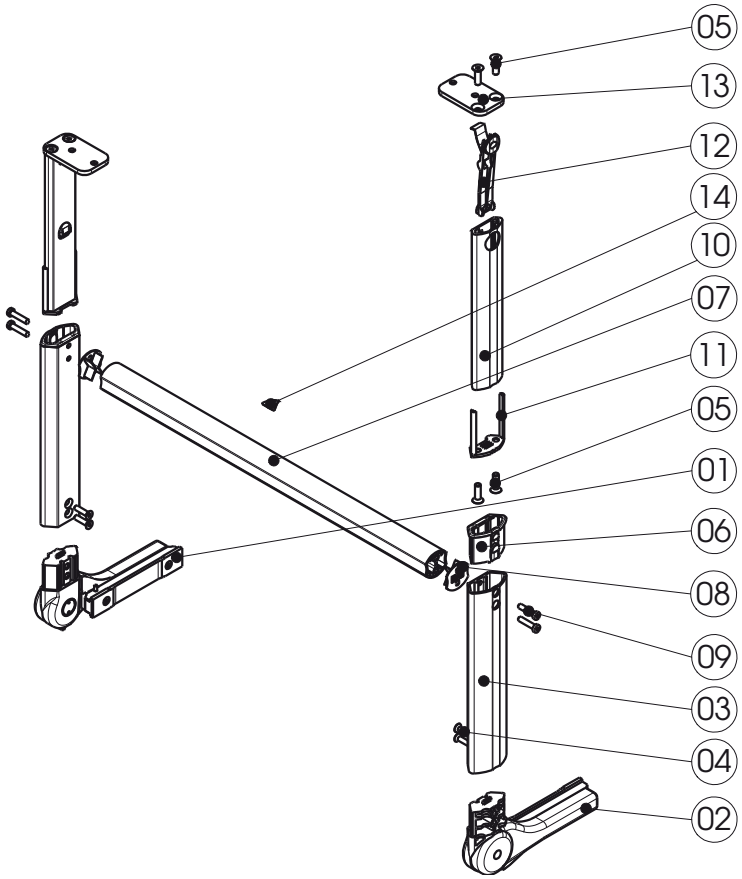
Side rails, lower leg section
for lying surface 190-200 cm (height 34 cm),
from year of construction 03/2010; BG2975-01

Item	Art. No.	Article	Qty
01	BG1212	Side rail joint, left	1
02	BG1211	Side rail joint, right	1
03	AP3005	Outer longitudinal profile	2
04	SR257	Thread tapping screw M5x20	4
05	SR751	Countersunk screw M6x20	8
06	KT1193-01	Guide, upper	2
07	AP3003	Cross profile, lower leg section	1
08	KT2737	Cross profile form disk	2
09	SR2386	Cylinder head screw 4.8x25	4
10	AP3006	Inner longitudinal profile	2
11	KT2736	Guide, lower	2
12	BG3136	Release with slide-in spring	2
13	F1182	Hand rail plate	2
14	T2007	Warning sign	1



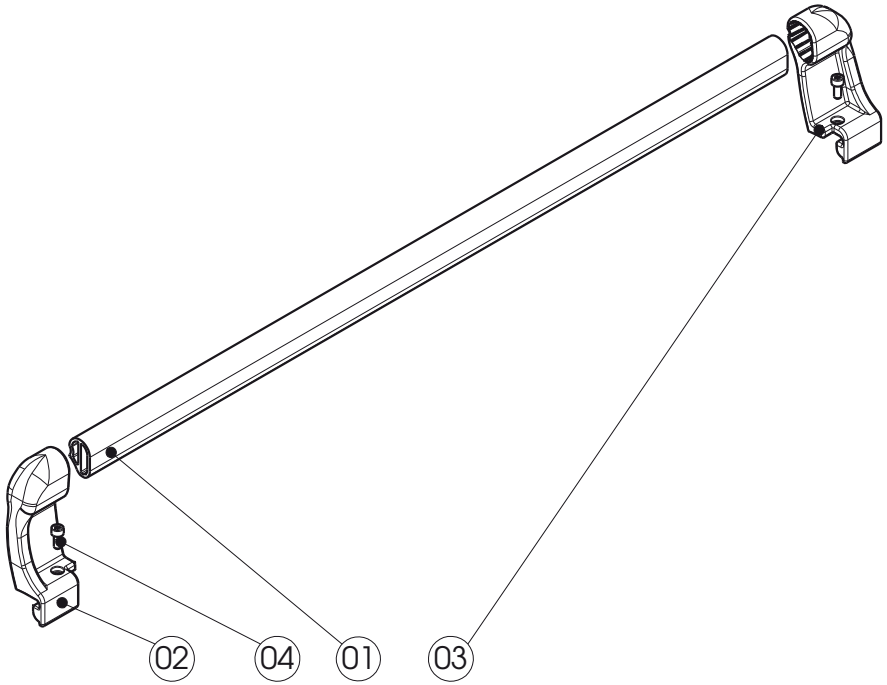
Side rails, lower leg section
for lying surface 210-220 cm (height 34 cm),
from year of construction 03/2010; BG2976-01

Item	Art. No.	Article	Qty
01	BG1212	Side rail joint, left	1
02	BG1211	Side rail joint, right	1
03	AP3005	Outer longitudinal profile	2
04	SR257	Thread tapping screw M5x20	4
05	SR751	Countersunk screw M6x20	8
06	KT1193-01	Guide, upper	2
07	AP3004	Cross profile, lower leg section	1
08	KT2737	Cross profile form disk	2
09	SR2386	Cylinder head screw 4.8x25	4
10	AP3006	Inner longitudinal profile	2
11	KT2736	Guide, lower	2
12	BG3136	Release with slide-in spring	2
13	F1182	Hand rail plate	2
14	T2007	Warning sign	1



Mattress holder, back section
for lying surface 200-210 cm,
from year of construction 03/2010; BG3034-01

Item	Art. No.	Article	Qty
01	AP2996	Railing, back section	1
02	KT2611-01	Mattress holder, right	1
03	KT2612-01	Mattress holder, left	1
04	SR2207	Thread tapping screw M5x16	2

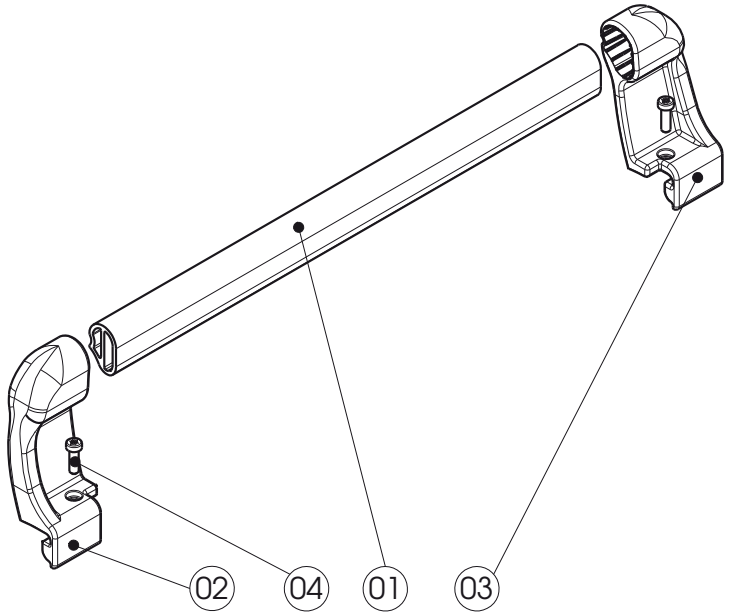


Mattress holder, lower leg section
for lying surface 190-200 cm,
from year of construction 03/2010; BG3036-01

Item	Art. No.	Article	Qty
01	AP2998	Railing, lower leg section	1
02	KT2611-01	Mattress holder, right	1
03	KT2612-01	Mattress holder, left	1
04	SR2207	Thread tapping screw M5x16	2

Mattress holder, lower leg section
for lying surface 210-220 cm,
from year of construction 03/2010; BG3037-01

Item	Art. No.	Article	Qty
01	AP2999	Railing, lower leg section	1
02	KT2611-01	Mattress holder, right	1
03	KT2612-01	Mattress holder, left	1
04	SR2207	Thread tapping screw M5x16	2



Side rails from year of construction 03/2010 | Side rail set (raised) 1/2

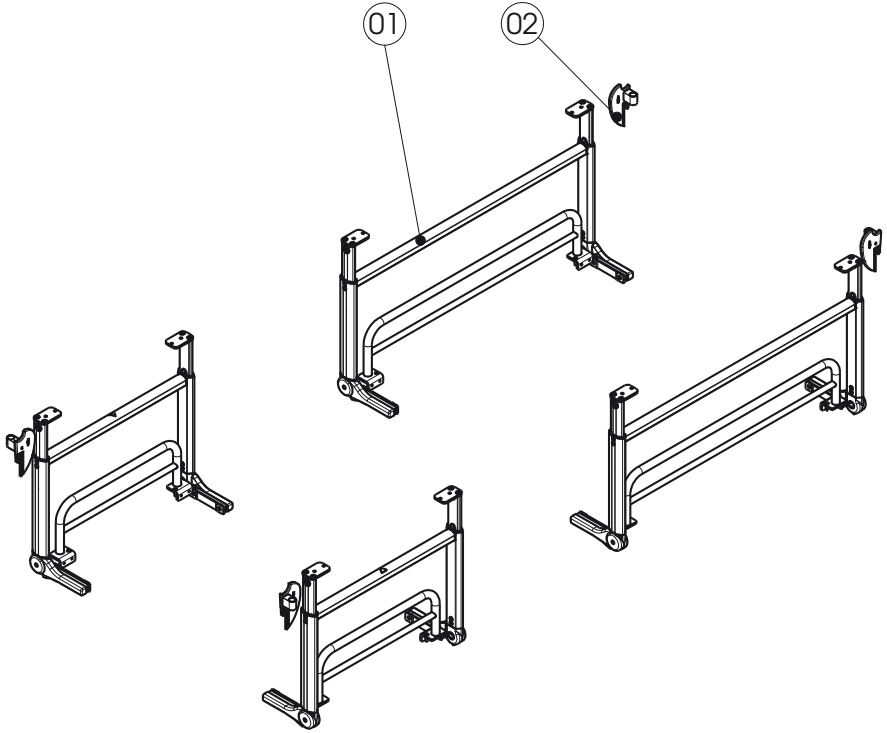
The side rails for the model S 962-2 are available in two heights: 34 cm (standard) and 40 cm (raised).

Side rail set (raised)
for lying surface 200 cm (height 40 cm),
from year of construction 03/2010; BG3125

Item	Art. No.	Article	Qty
01	BG3121	Side rail set (raised)	1
02	BG1912-01	Clamp, raised side rails *(original)*	1
	BG2308	*Clamp, raised side rails (service)*	*1*

Side rail set (raised)
for lying surface 210 cm (height 40 cm),
from year of construction 03/2010; BG3126

Item	Art. No.	Article	Qty
01	BG3122	Side rail set (raised)	1
02	BG1912-01	Clamp, raised side rails *(original)*	1
	BG2308	*Clamp, raised side rails (service)*	*1*

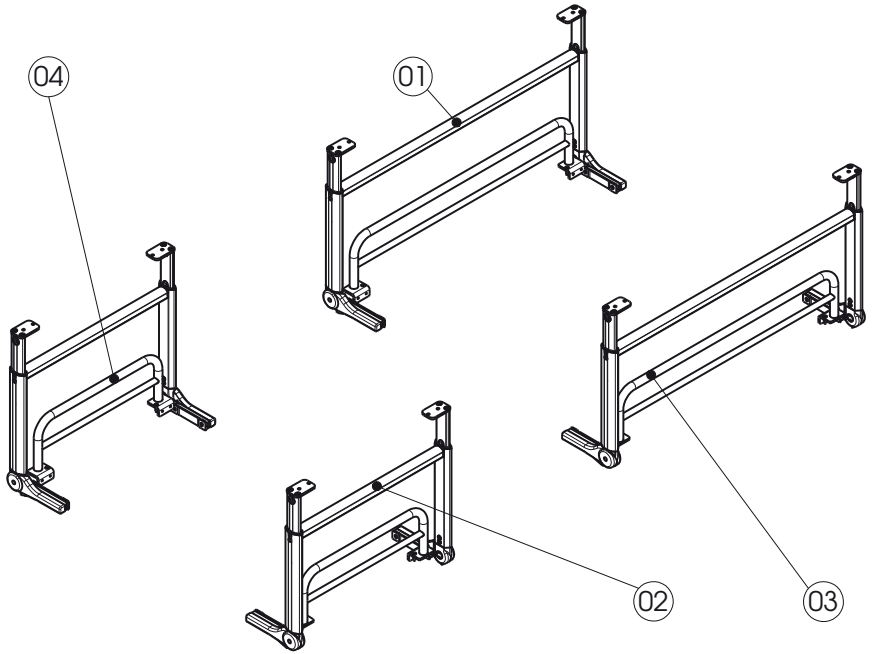


Side rail set (raised)
for lying surface 200 cm (height 40 cm),
from year of construction 03/2010; BG3121

Item	Art. No.	Article	Qty
01	BG3106	Raised side rails, back section	2
02	BG3108	Raised side rails, lower leg section	2
03	BG3142	Raised mattress holder, back section	2
04	BG3144	Raised mattress holder, lower leg section	2

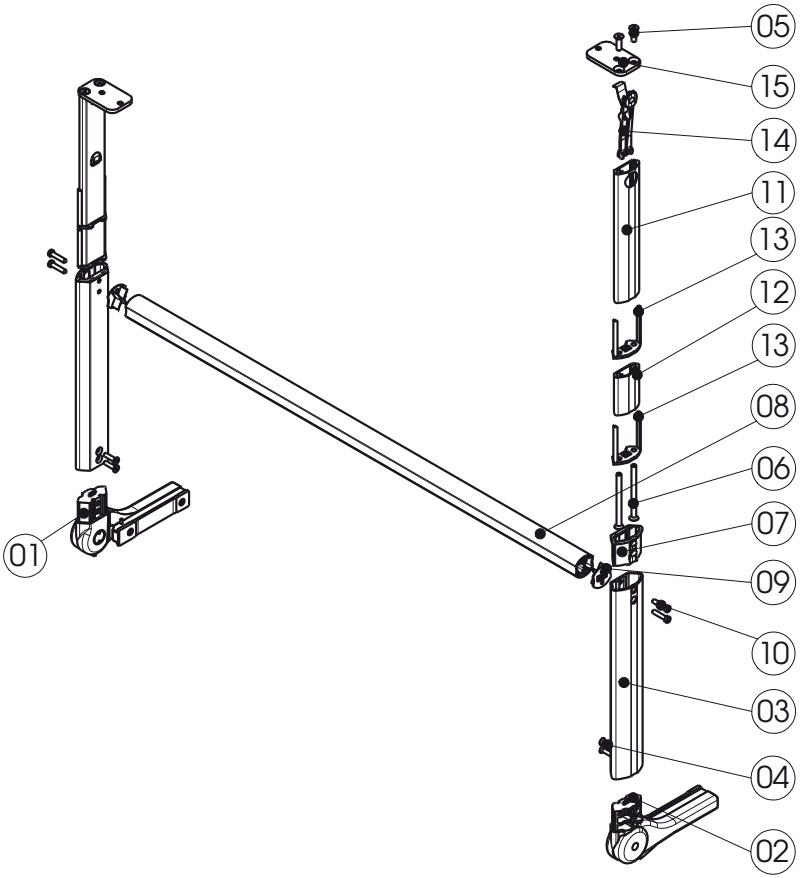
Side rail set (raised)
for lying surface 210 cm (height 40 cm),
from year of construction 03/2010; BG3122

Item	Art. No.	Article	Qty
01	BG3106	Raised side rails, back section	2
02	BG3109	Raised side rails, lower leg section	2
03	BG3142	Raised mattress holder, back section	2
04	BG3145	Raised mattress holder, lower leg section	2



Side rail set (raised)
for lying surface 200-210 cm,
from year of construction 03/2010; BG3106

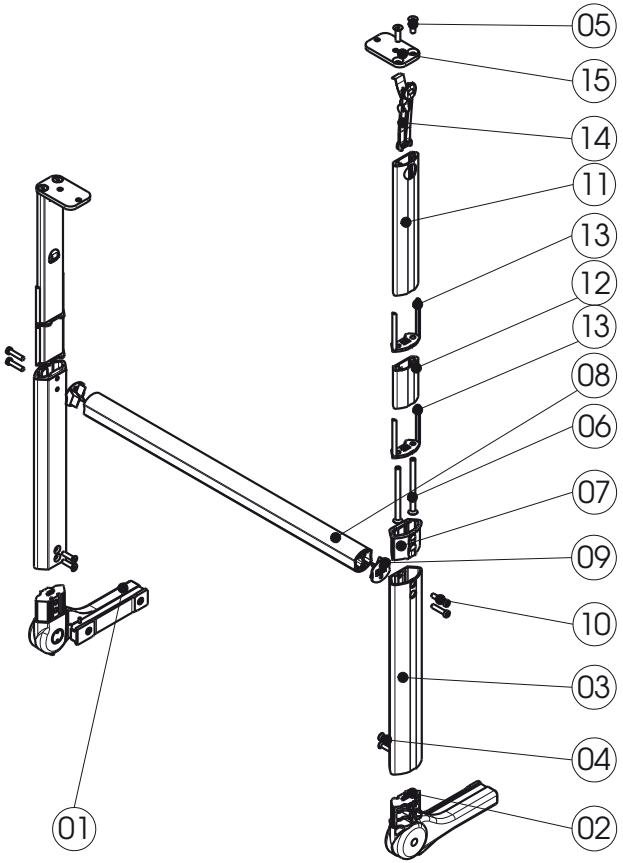
Item	Art. No.	Article	Qty
01	BG1060	Side rail joint, left	1
02	BG1059	Side rail joint, right	1
03	AP3069	Outer longitudinal profile, SG	2
04	SR257	Thread tapping screw M5x20	4
05	SR751	Countersunk screw M6x20	4
06	SR542	Countersunk screw M6x80	4
07	KT1193-01	Guide, upper	2
08	AP3001	Cross profile, back section	1
09	KT2737	Cross profile form disk	2
10	SR2386	Cylinder head screw 4.8x25	4
11	AP3006	Inner longitudinal profile	2
12	AP705	Side rail raising	2
13	KT2736	Guide, lower	4
14	BG3136	Release with slide-in spring	2
15	F1182	Hand rail plate	2



Side rails from year of construction 03/2010 | Side rail set (raised) | Lower leg section 1/2

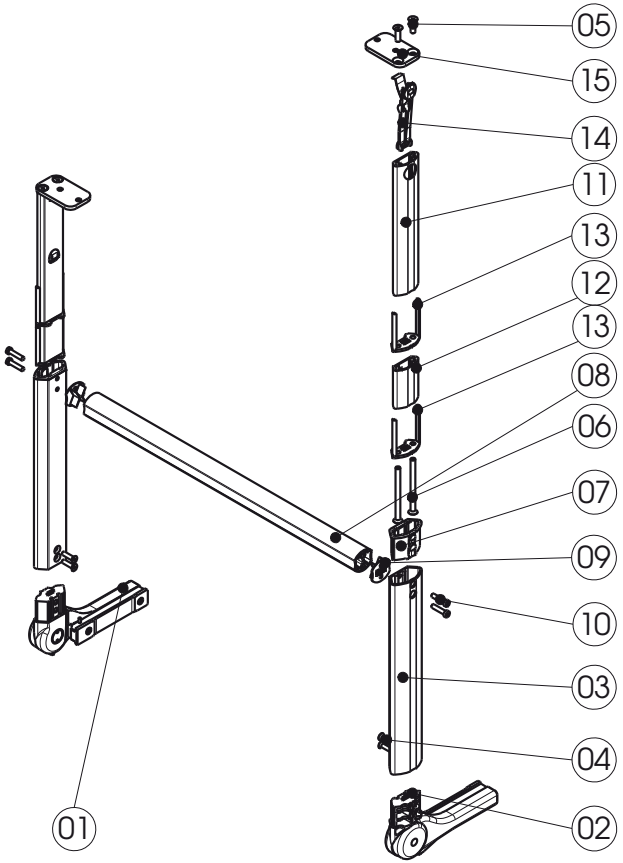
Side rail set, lower leg section (raised)
for lying surface 190-200 cm,
from year of construction 03/2010; BG3108

Item	Art. No.	Article	Qty
01	BG1060	Side rail joint, left	1
02	BG1059	Side rail joint, right	1
03	AP3069	Outer longitudinal profile	2
04	SR257	Thread tapping screw M5x20	4
05	SR751	Countersunk screw M6x20	4
06	SR542	Countersunk screw M6x80	4
07	KT1193-01	Guide, upper	2
08	AP3003	Cross profile, lower leg section	1
09	KT2737	Cross profile form disk	2
10	SR2386	Cylinder head screw 4.8x25	4
11	AP3006	Inner longitudinal profile	2
12	AP705	Side rail raising	2
13	KT2736	Guide, lower	4
14	BG3136	Release with slide-in spring	2
15	F1182	Hand rail plate	2



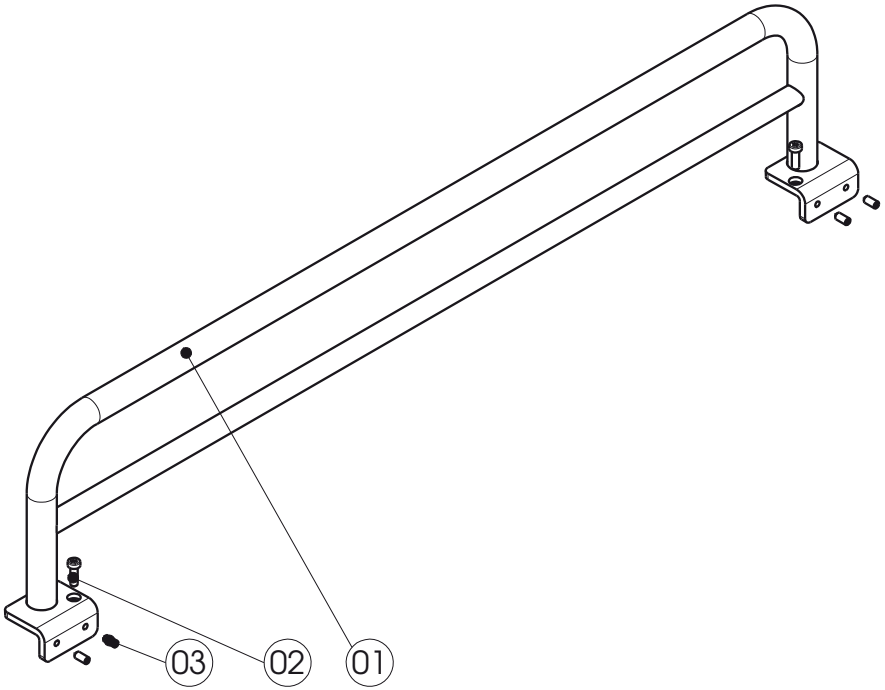
Side rail set, lower leg section (raised)
for lying surface 210-220 cm,
from year of construction 03/2010; BG3109

Item	Art. No.	Article	Qty
01	BG1060	Side rail joint, left	1
02	BG1059	Side rail joint, right	1
03	AP3069	Outer longitudinal profile	2
04	SR257	Thread tapping screw M5x20	4
05	SR751	Countersunk screw M6x20	4
06	SR542	Countersunk screw M6x80	4
07	KT1193-01	Guide, upper	2
08	AP3004	Cross profile, lower leg section	1
09	KT2737	Cross profile form disk	2
10	SR2386	Cylinder head screw 4.8x25	4
11	AP3006	Inner longitudinal profile	2
12	AP705	Side rail raising	2
13	KT2736	Guide, lower	4
14	BG3136	Release with slide-in spring	2
15	F1182	Hand rail plate	2



Mattress holder, back section (raised)
for lying surface 200-210 cm,
from year of construction 03/2010; BG3142

Item	Art. No.	Article	Qty
01	F3013	Mattress holder, back section	1
02	SR2207	Thread tapping screw M5x16	2
03	SR1291	Threaded pin M5x12	4

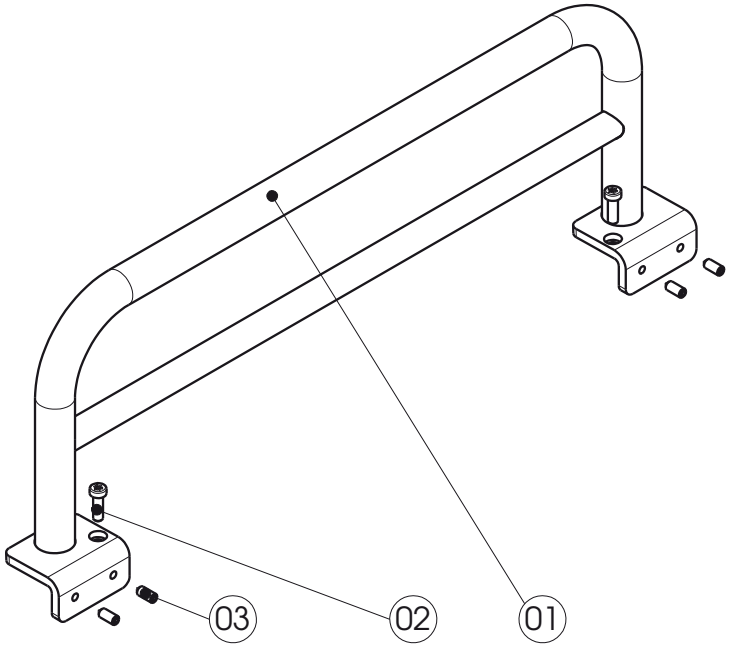


Mattress holder, lower leg section (raised)
for lying surface 190-200 cm,
from year of construction 03/2010; BG3144

Item	Art. No.	Article	Qty
01	F3015	Mattress holder, lower leg section	1
02	SR2207	Thread tapping screw M5x16	2
03	SR1291	Threaded pin M5x12	4

Mattress holder, lower leg section (raised)
for lying surface 210-220 cm,
from year of construction 03/2010; BG3145

Item	Art. No.	Article	Qty
01	F3016	Mattress holder, lower leg section	1
02	SR2207	Thread tapping screw M5x16	2
03	SR1291	Threaded pin M5x12	4

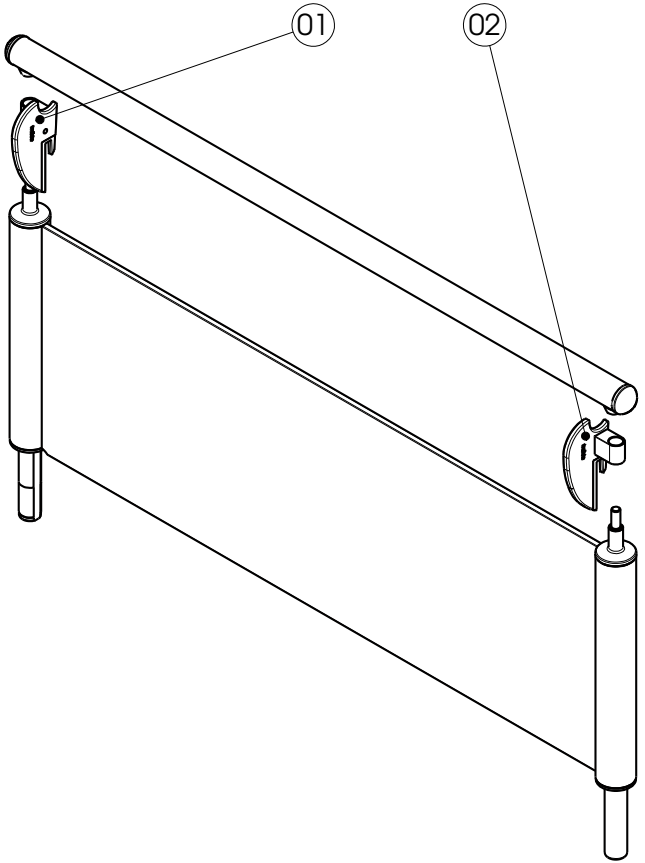


Clamp (raised side rails), original,
from year of construction 03/2010; BG1912-01

Item	Art. No.	Article	Qty
01	KT2497	Clamp, right, raised side rails	2
02	KT2498	Clamp, left, raised side rails	2

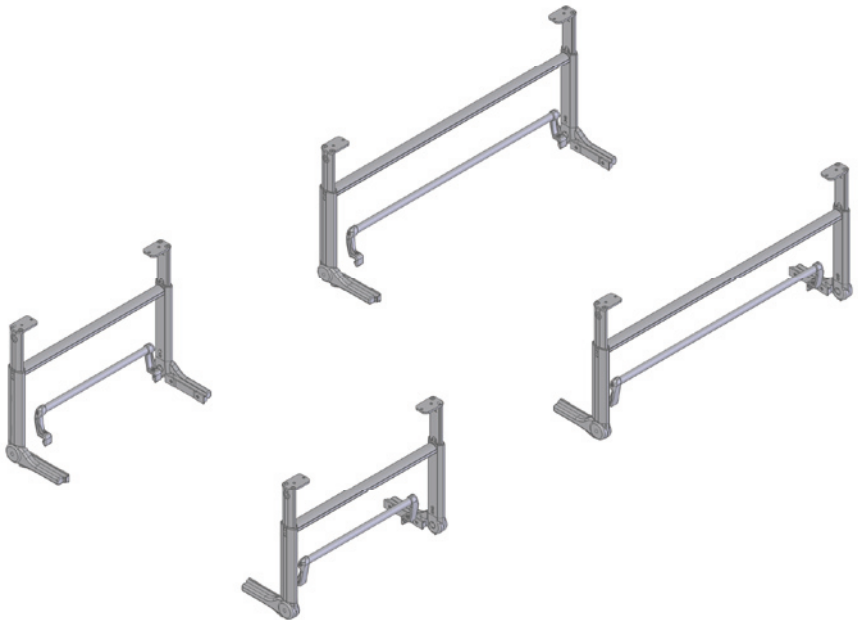
Clamp (raised side rails), service,
from year of construction 03/2010; BG2308

Art. No.	*Article*	*Qty*
KT2570	*Clamp, right, raised side rails*	*2*
KT2571	*Clamp, left, raised side rails*	*2*
F2704	*Clamp bracket*	*4*
SR2335	*Flat-headed screw*	*4*
SR2334	*Cap nut*	*4*



Side rails to year of construction 02/2010

This section contains exploded views and assembly parts lists which are divided into corresponding individual parts.



CONTENTS

Side rail set 🕮 105
- Back section 🕮 106
- Lower leg section 🕮 107
- Mattress holder, back section 🕮 109
- Mattress holder, lower leg section 🕮 110

Side rail set (raised) 🕮 111
- Back section 🕮 113
- Lower leg section 🕮 114
- Mattress holder, back section 🕮 116
- Mattress holder, lower leg section 🕮 117
- Clamp 🕮 118

Side rails to year of construction 02/2010 | Side rail set

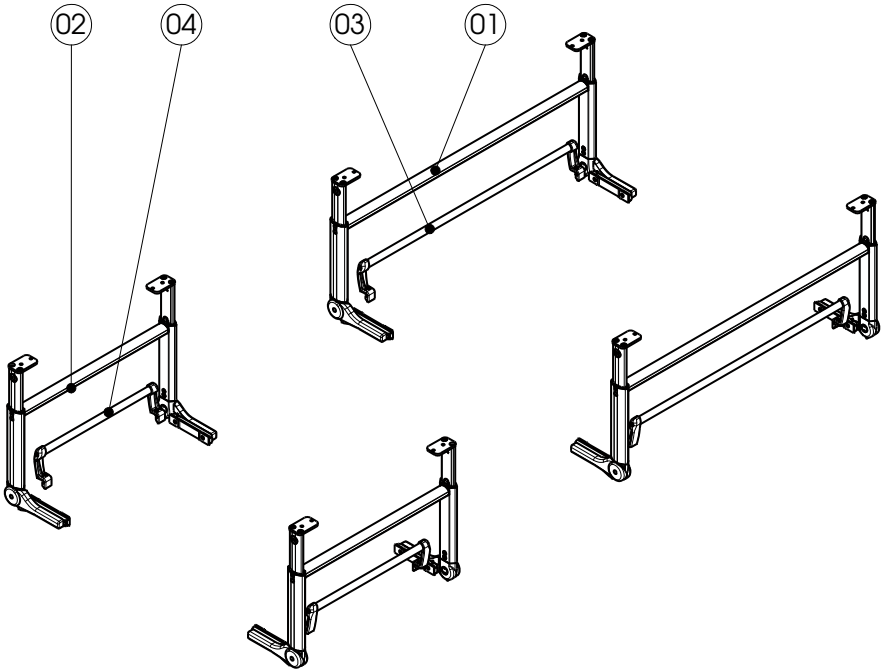
The side rails for the model S 962-2 are available in two heights: 34 cm (standard) and 40 cm (raised).

Side rail set
for lying surface 200 cm (height 34 cm),
to year of construction 02/2010; BG2907

Item	Art. No.	Article	Qty
01	BG509	Side rails, back section	2
02	BG510	Side rails, lower leg section	2
03	BG1634	Mattress holder, back section	2
04	BG1635	Mattress holder, lower leg section	2

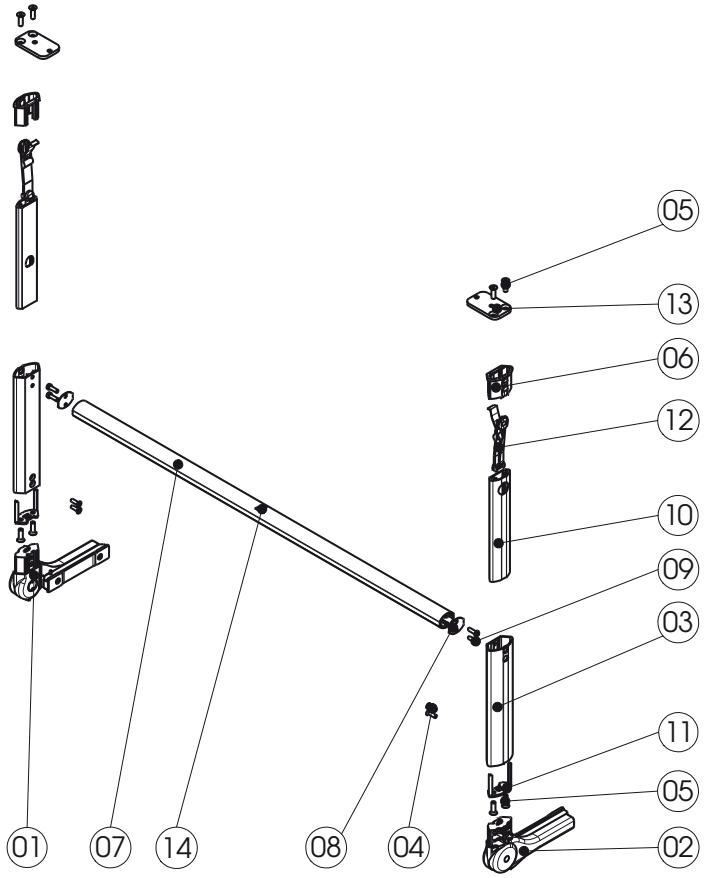
Side rail set
for lying surface 210 cm (height 34 cm),
to year of construction 02/2010; BG2066

Item	Art. No.	Article	Qty
01	BG509	Side rails, back section	2
02	BG2065	Side rails, lower leg section	2
03	BG1634	Mattress holder, back section	2
04	BG1636	Mattress holder, lower leg section	2



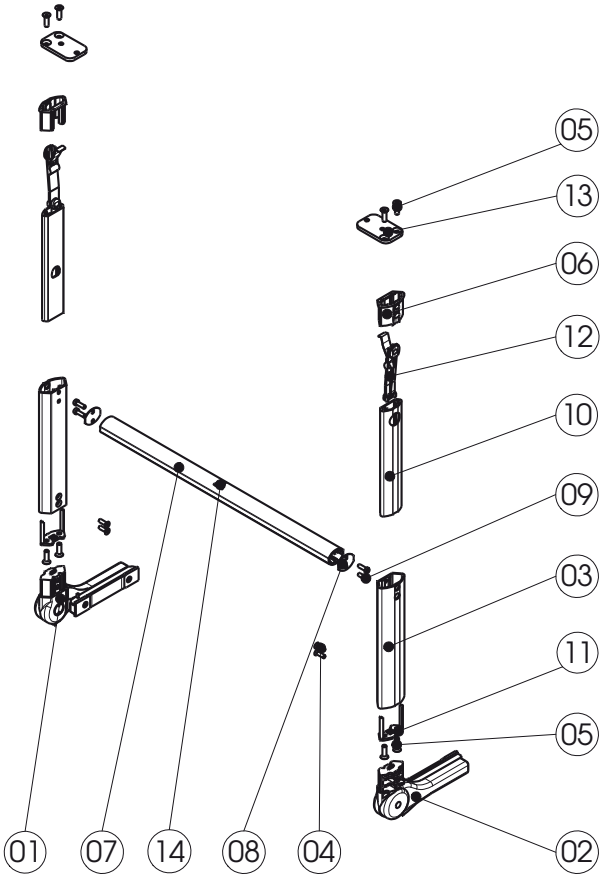
Side rails, back section
for lying surface 200-210 cm (height 34 cm),
to year of construction 02/2010; BG509

Item	Art. No.	Article	Qty
01	BG1212	Side rail joint, left	1
02	BG1211	Side rail joint, right	1
03	AP347	Outer longitudinal profile	2
04	SR2332	Thread tapping screw M5x16	4
05	SR191	Countersunk screw M6x20	8
06	KT1193-01	Guide, upper	2
07	AP351	Cross profile	1
08	KT220	Form disk	2
09	SR750	Thread tapping screw M5x20	4
10	AP348-01	Inner longitudinal profile	2
11	KT1194	Guide, lower	2
12	BG 2318	Release with slide-in spring	2
13	F1182	Hand rail plate	2
14	T2007	Warning sign	1



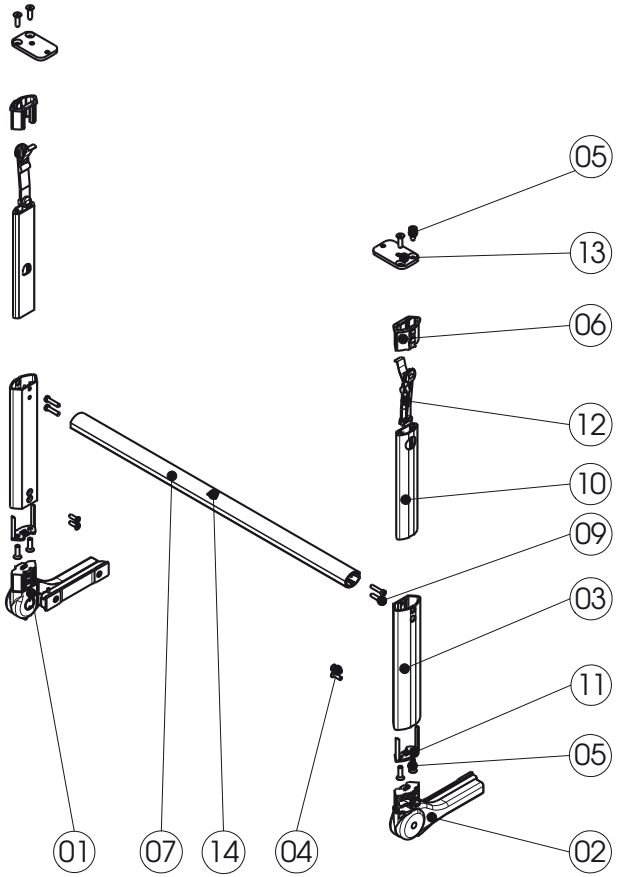
Side rails, lower leg section
for lying surface 190-200 cm (height 34 cm),
to year of construction 02/2010; BG510

Item	Art. No.	Article	Qty
01	BG1212	Side rail joint, left	1
02	BG1211	Side rail joint, right	1
03	AP347	Outer longitudinal profile	2
04	SR2332	Thread tapping screw M5x16	4
05	SR191	Countersunk screw M6x20	8
06	KT1193-01	Guide, upper	2
07	AP372	Cross profile	1
08	KT220	Form disk	2
09	SR750	Thread tapping screw M5x20	4
10	AP348-01	Inner longitudinal profile	2
11	KT1194	Guide, lower	2
12	BG2318	Release with slide-in spring	2
13	F1182	Hand rail plate	2
14	T2007	Warning sign	1



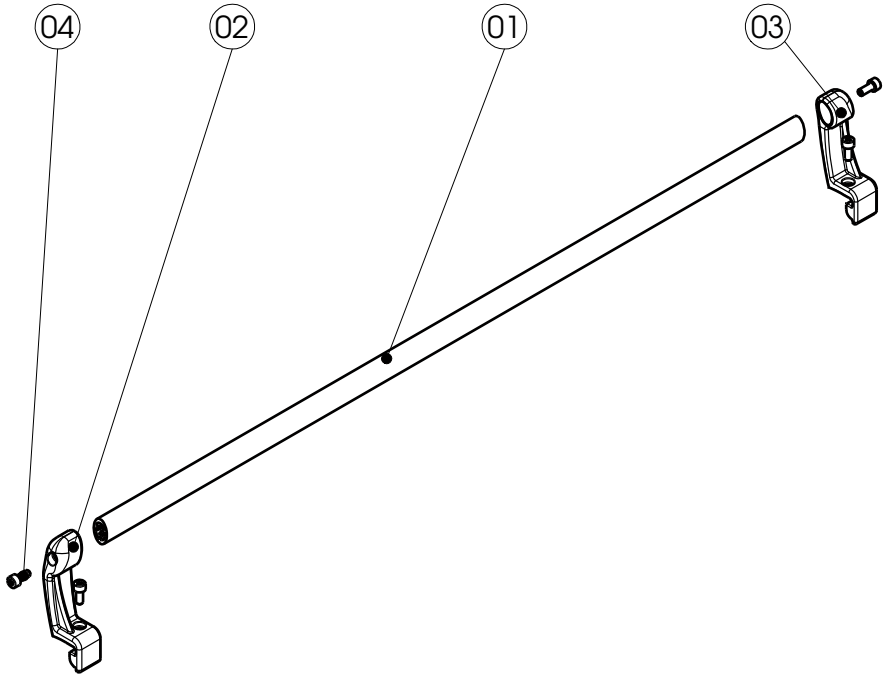
Side rails, lower leg section
for lying surface 210-220 cm (height 34 cm),
to year of construction 02/2010; BG2065

Item	Art. No.	Article	Qty
01	BG1212	Side rail joint, left	1
02	BG1211	Side rail joint, right	1
03	AP347	Outer longitudinal profile	2
04	SR2332	Thread tapping screw M5x16	4
05	SR191	Countersunk screw M6x20	8
06	KT1193-01	Guide, upper	2
07	AP460	Cross profile	1
08	KT220	Form disk	2
09	SR750	Thread tapping screw M5x20	4
10	AP348-01	Inner longitudinal profile	2
11	KT1194	Guide, lower	2
12	BG2318	Release with slide-in spring	2
13	F1182	Hand rail plate	2
14	T2007	Warning sign	1



Mattress holder, back section
for lying surface 200-210 cm,
to year of construction 02/2010; BG1634

Item	Art. No.	Article	Qty
01	AP356	Railing, back section	1
02	KT1176	Mattress holder, right	1
03	KT1177	Mattress holder, left	1
04	SR749	Thread tapping screw M5x12	4

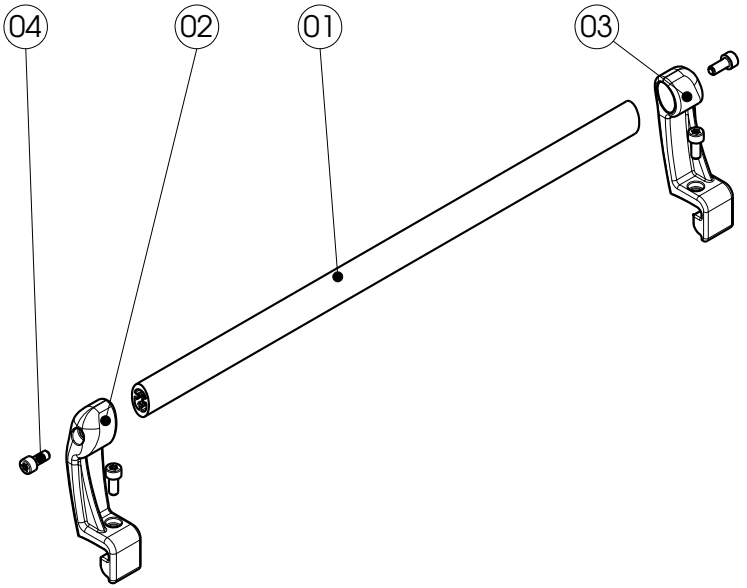


Mattress holder, lower leg section
for lying surface 190-200 cm,
to year of construction 02/2010; BG1635

Item	Art. No.	Article	Qty
01	AP361	Railing, lower leg section	1
02	KT1176	Mattress holder, right	1
03	KT1177	Mattress holder, left	1
04	SR749	Thread tapping screw M5x12	4

Mattress holder, lower leg section
for lying surface 210-220 cm,
to year of construction 02/2010; BG1636

Item	Art. No.	Article	Qty
01	AP463	Railing, back section	1
02	KT1176	Mattress holder, right	1
03	KT1177	Mattress holder, left	1
04	SR749	Thread tapping screw M5x12	4



Side rails to year of construction 02/2010 | Side rail set (raised) 1/2

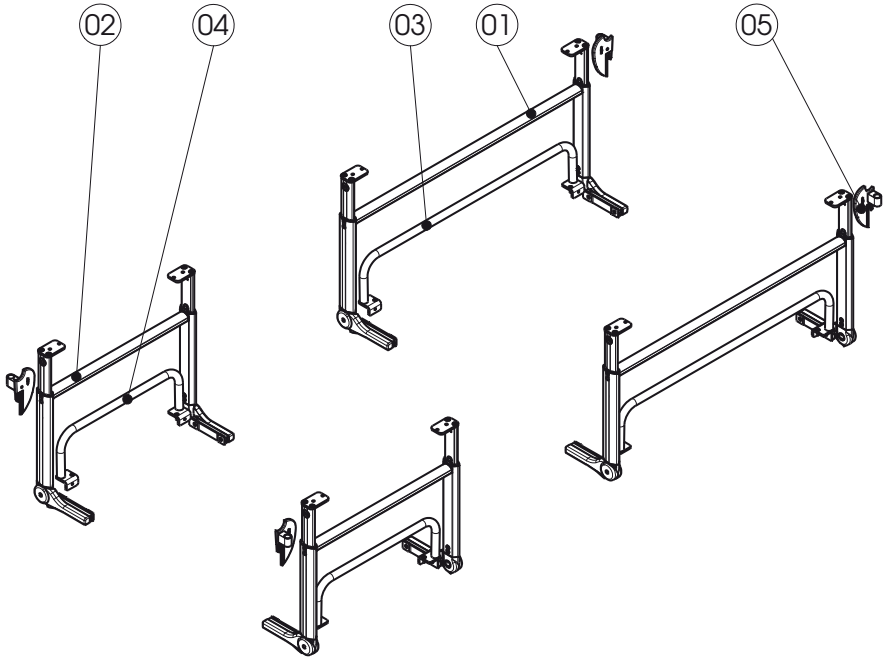
The side rails for the model S 962-2 are available in two heights: 34 cm (standard) and 40 cm (raised).

Side rail set (raised)
for lying surface 200 cm (height 40 cm),
to year of construction 02/2010; BG1983

Item	Art. No.	Article	Qty
01	BG1015-02	Raised side rails, back section	2
02	BG1016-02	Raised side rails, lower leg section	2
03	BG1607	Raised mattress holder, back section	2
04	BG1606	Raised mattress holder, lower leg section	2
05	BG1912-01	Clamp, raised side rails	1

Side rail set (raised)
for lying surface 210 cm (height 40 cm),
to year of construction 02/2010; BG1984

Item	Art. No.	Article	Qty
01	BG1015-02	Raised side rails, back section	2
02	BG1017-02	Raised side rails, lower leg section	2
03	BG1607	Raised mattress holder, back section	2
04	BG1608	Raised mattress holder, lower leg section	2
05	BG1912-01	Clamp, raised side rails	1

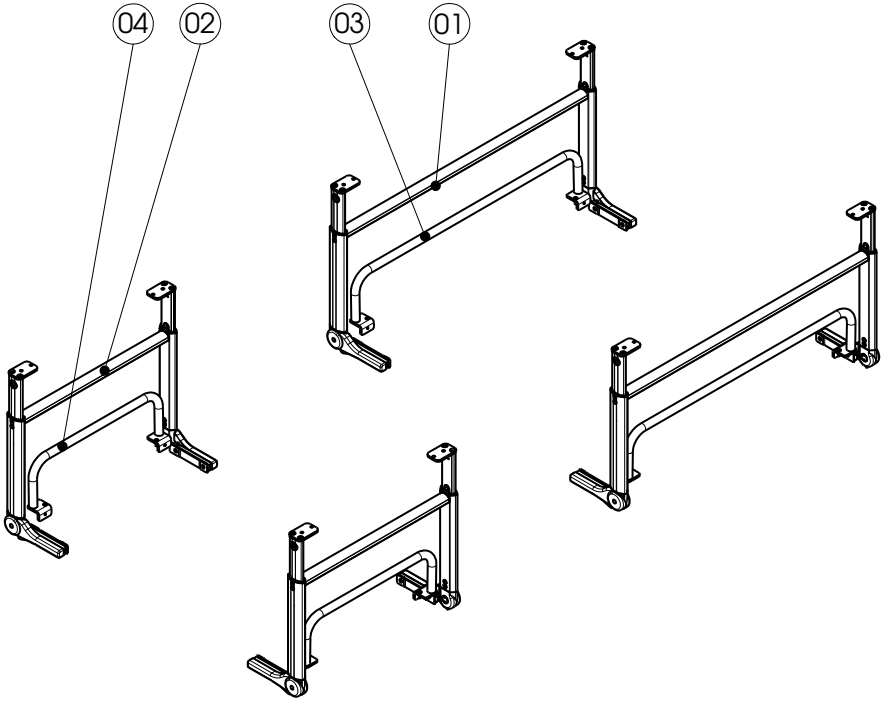


Side rail set (raised)
for lying surface 200 cm (height 40 cm),
to year of construction 02/2010; BG1526

Item	Art. No.	Article	Qty
01	BG1015-02	Raised side rails, back section	2
02	BG1016-02	Raised side rails, lower leg section	2
03	BG1607	Raised mattress holder, back section	2
04	BG1606	Raised mattress holder, lower leg section	2

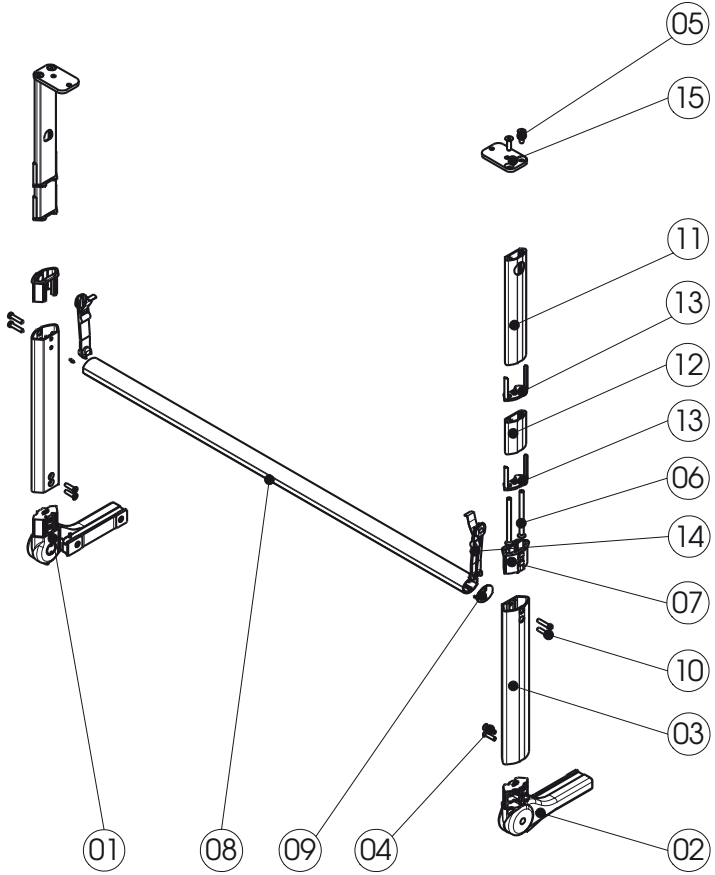
Side rail set (raised)
for lying surface 210 cm (height 40 cm),
to year of construction 02/2010; BG1612

Item	Art. No.	Article	Qty
01	BG1015-02	Raised side rails, back section	2
02	BG1017-02	Raised side rails, lower leg section	2
03	BG1607	Raised mattress holder, back section	2
04	BG1608	Raised mattress holder, lower leg section	2



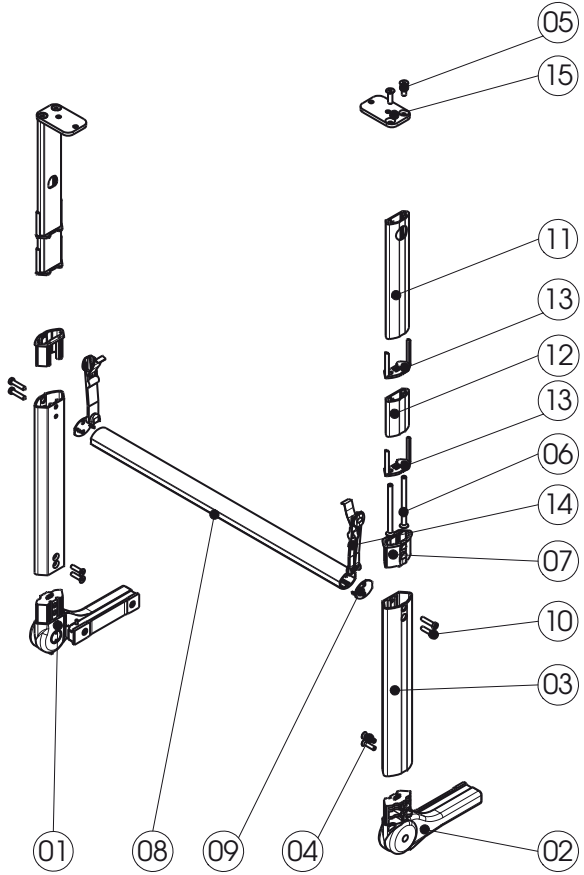
Side rail set (raised)
for lying surface 200-210 cm,
to year of construction 02/2010; BG1015-02

Item	Art. No.	Article	Qty
01	BG1060	Side rail joint, left	1
02	BG1059	Side rail joint, right	1
03	AP2048	Outer longitudinal profile	2
04	SR257	Thread tapping screw M5x20	4
05	SR751	Countersunk screw M6x20	4
06	SR542	Countersunk screw M6x80	4
07	KT1193-01	Guide, upper	2
08	AP351	Cross profile	1
09	KT220	Form disk	2
10	SR2386	Cylinder head screw 4.8x25	4
11	AP348-01	Inner longitudinal profile	2
12	AP705	Side rail raising	2
13	KT1194	Guide, lower	4
14	BG2318	Release with slide-in spring	2
15	F1182	Hand rail plate	2



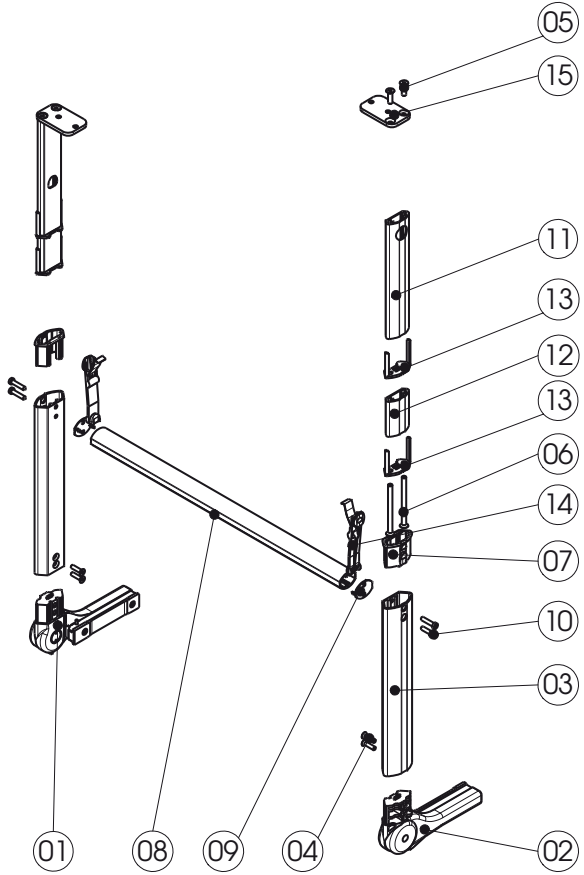
Side rail set, lower leg section (raised)
for lying surface 190-200 cm,
to year of construction 02/2010; BG1016-02

Item	Art. No.	Article	Qty
01	BG1060	Side rail joint, left	1
02	BG1059	Side rail joint, right	1
03	AP2048	Outer longitudinal profile	2
04	SR257	Thread tapping screw M5x20	4
05	SR751	Countersunk screw M6x20	4
06	SR542	Countersunk screw M6x80	4
07	KT1193-01	Guide, upper	2
08	AP372	Cross profile	1
09	KT220	Form disk	2
10	SR2386	Cylinder head screw 4.8x25	4
11	AP348-01	Inner longitudinal profile	2
12	AP705	Side rail raising	2
13	KT1194	Guide, lower	4
14	BG2318	Release with slide-in spring	2
15	F1182	Hand rail plate	2



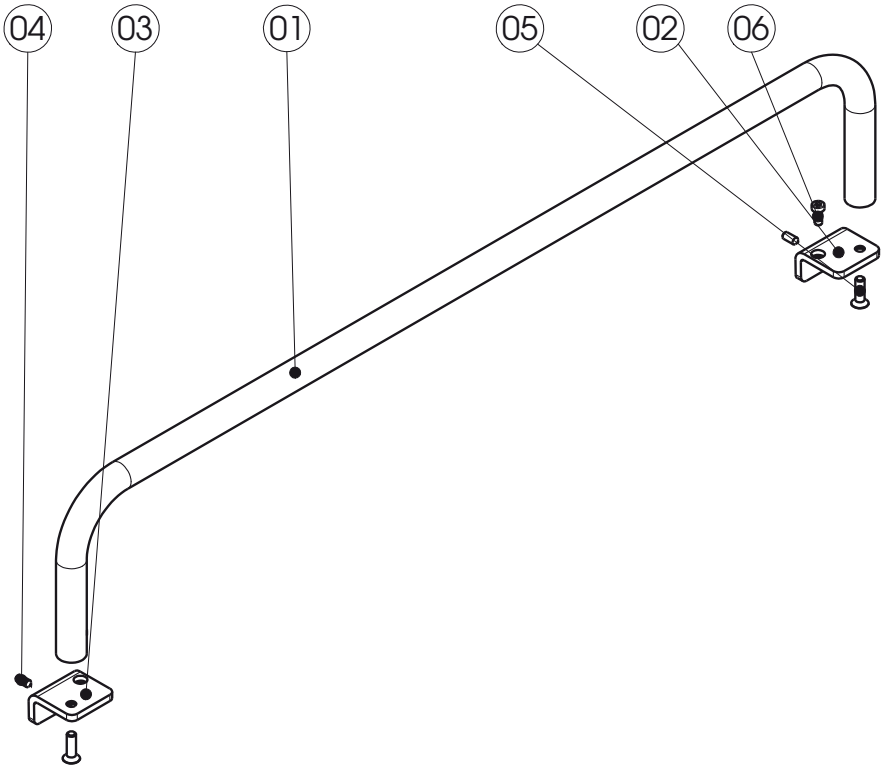
Side rail set, lower leg section (raised)
for lying surface 210-220 cm,
to year of construction 02/2010; BG1017-02

Item	Art. No.	Article	Qty
01	BG1060	Side rail joint, left	1
02	BG1059	Side rail joint, right	1
03	AP2048	Outer longitudinal profile	2
04	SR257	Thread tapping screw M5x20	4
05	SR751	Countersunk screw M6x20	4
06	SR542	Countersunk screw M6x80	4
07	KT1193-01	Guide, upper	2
08	AP460	Cross profile	1
09	KT220	Form disk	2
10	SR2386	Cylinder head screw 4.8x25	4
11	AP348-01	Inner longitudinal profile	2
12	AP705	Side rail raising	2
13	KT1194	Guide, lower	4
14	BG2318	Release with slide-in spring	2
15	F1182	Hand rail plate	2



Mattress holder, back section (raised)
for lying surface 200-210 cm,
to year of construction 02/2010; BG1607

Item	Art. No.	Article	Qty
01	AP2220	Raised mattress holder	1
02	F2277-01	Bracket, right	1
03	F2278-01	Bracket, left	1
04	SR1291	Threaded pin M5x12	2
05	SR751	Countersunk screw M6x20	2
06	SR1068	Cylinder head screw M5x12	2

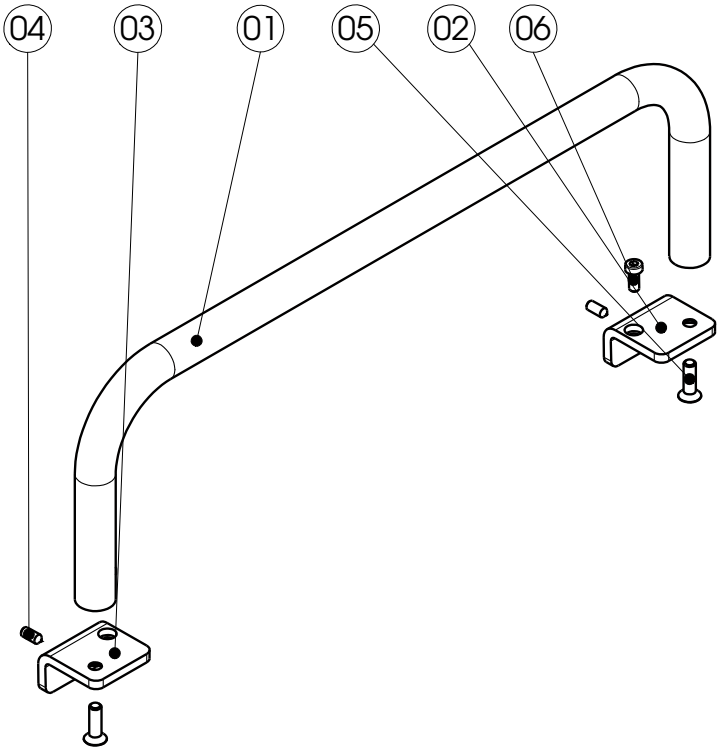


Mattress holder, lower leg section (raised)
for lying surface 190-200 cm,
to year of construction 02/2010; BG1606

Item	Art. No.	Article	Qty
01	AP2223	Raised mattress holder	1
02	F2277-01	Bracket, right	1
03	F2278-01	Bracket, left	1
04	SR1291	Threaded pin M5x12	2
05	SR751	Countersunk screw M6x20	2
06	SR1068	Cylinder head screw M5x12	2

Mattress holder, lower leg section (raised)
for lying surface 210-220 cm,
to year of construction 02/2010; BG1608

Item	Art. No.	Article	Qty
01	AP2271	Raised mattress holder	1
02	F2277-01	Bracket, right	1
03	F2278-01	Bracket, left	1
04	SR1291	Threaded pin M5x12	2
05	SR751	Countersunk screw M6x20	2
06	SR1068	Cylinder head screw M5x12	2

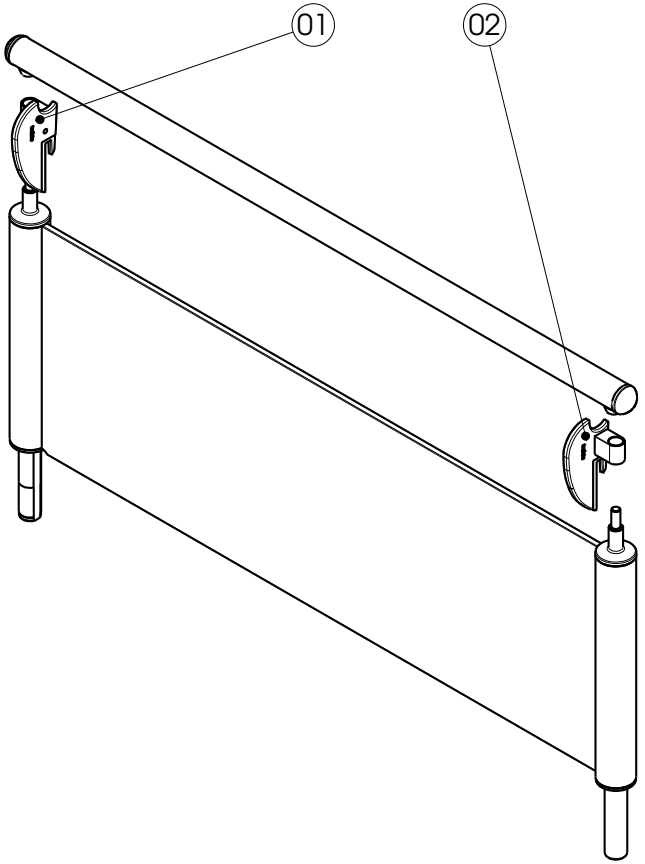


Clamp (raised side rails), original,
to year of construction 02/2010; BG1912-01

Item	Art. No.	Article	Qty
01	KT2497	Clamp, right, raised side rails	2
02	KT2498	Clamp, left, raised side rails	2

Clamp (raised side rails), service,
from year of construction 03/2010; BG2308

Art. No.	*Article*	*Qty*
KT2570	*Clamp, right, raised side rails*	*2*
KT2571	*Clamp, left, raised side rails*	*2*
F2704	*Clamp bracket*	*4*
SR2335	*Flat-headed screw*	*4*
SR2334	*Cap nut*	*4*

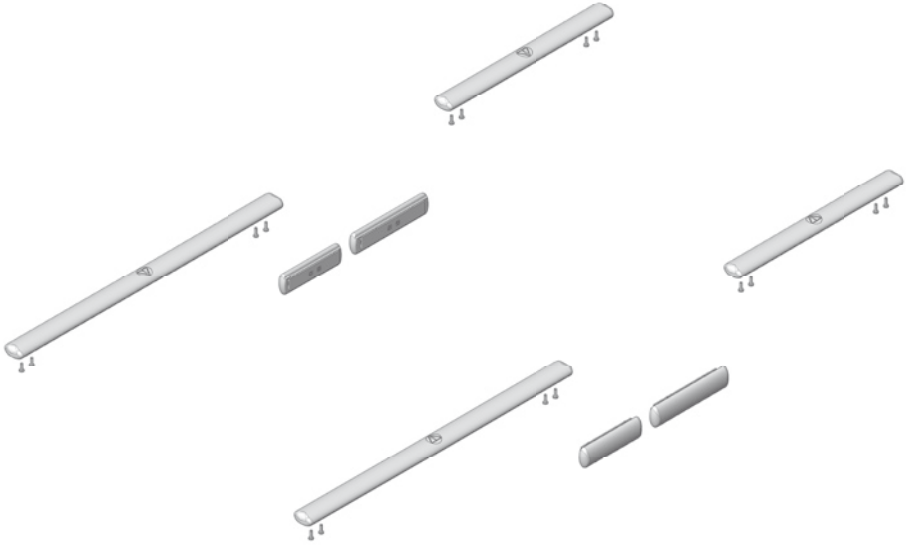


Bumper set

This section contains exploded views and assembly parts lists which are divided into corresponding individual parts as well as a description of how to replace the parts.

CONTENTS

Bumper set 🕮 120
Bumper set 🕮 121
Replacing the bumpers 🕮 122



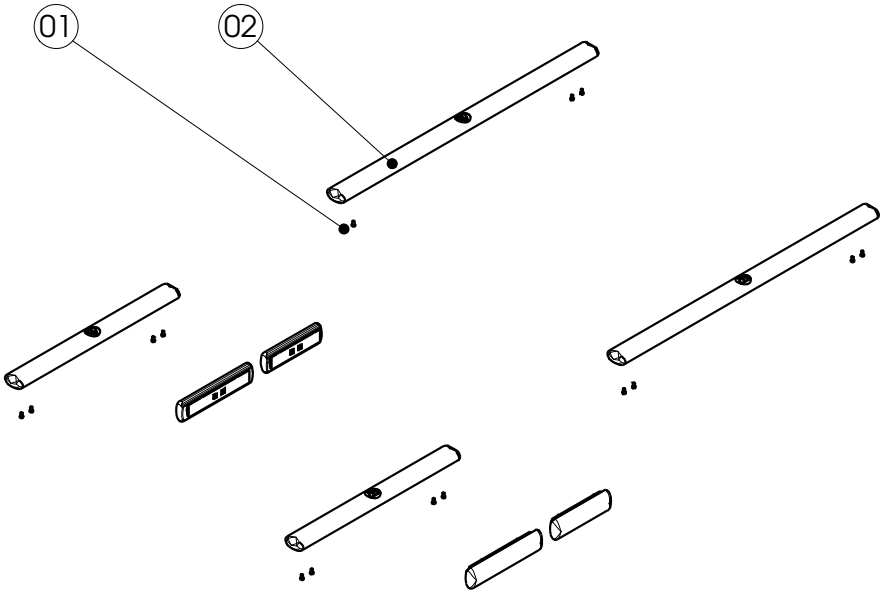
Bumper set | Bumper set

Bumper set for lying surface 200 cm;
BG1528

Item	Art. No.	Article	Qty
01	SR2209	Cylinder head screw M5x10	16
02	BG3438	Bumper set	1

Bumper set for lying surface 210 cm;
BG1988

Item	Art. No.	Article	Qty
01	SR2209	Cylinder head screw M5x10	16
02	BG3439	Bumper set	1



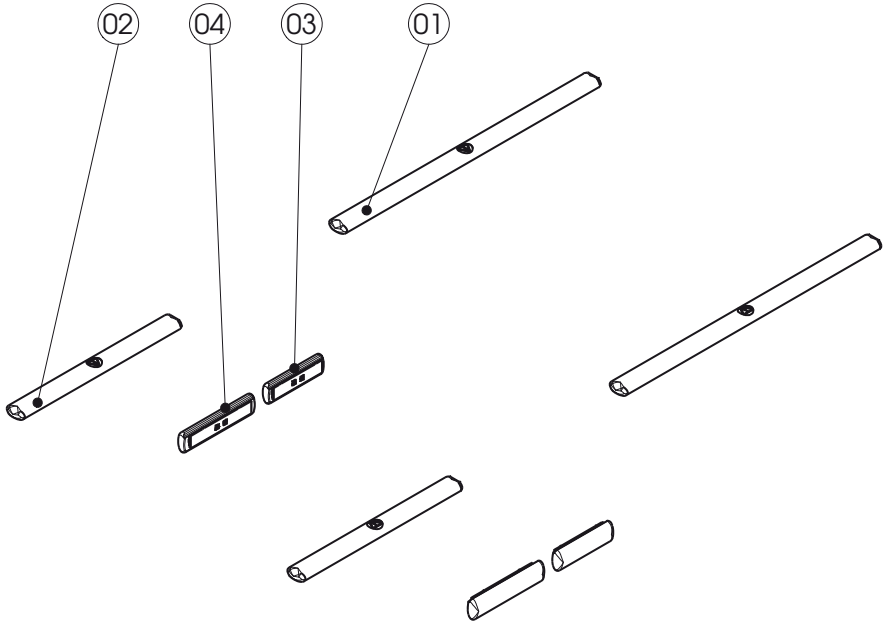
Bumper set | Bumper set | Bumper set

Bumper set for lying surface 200 cm;
BG3438

Item	Art. No.	Article	Qty
01	F568	Bumper, back section	2
02	F567	Bumper, lower leg section	2
03	KT241-01	Bumper, seat section	2
04	KT239-01	Bumper, upper leg section	2

Bumper set for lying surface 210 cm;
BG3439

Item	Art. No.	Article	Qty
01	F568	Bumper, back section	2
02	F686	Bumper, lower leg section	2
03	KT241-01	Bumper, seat section	2
04	KT239-01	Bumper, upper leg section	2



A. Back and lower leg section

01. Remove four cylinder head screws on inside of the bumper (Fig. A01).

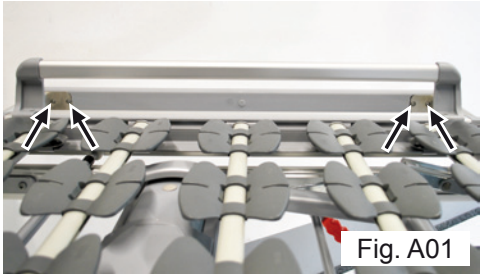


Fig. A01

B. Seat section

01. Raise back section (not illustrated).
02. Remove both screws and cap (Fig. B02).
03. Pull out bumper at the sides (Fig. B03).

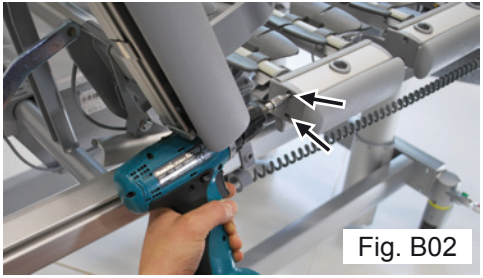


Fig. B02

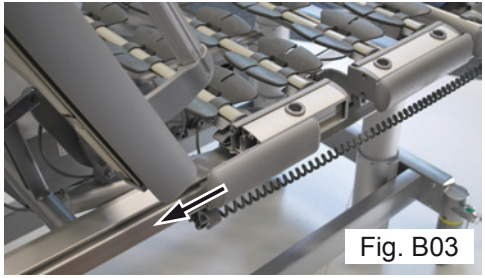


Fig. B03

C. Upper leg section

01. Raise upper leg section (not illustrated).
02. Remove both screws and cap (Fig. C02).
03. Pull out ram protection at the sides (Fig. C03).

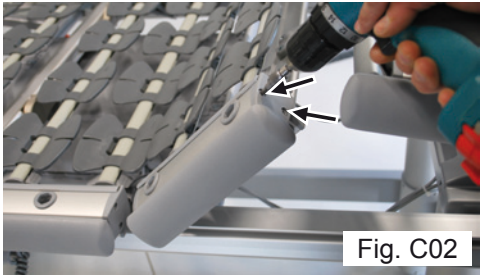


Fig. C02

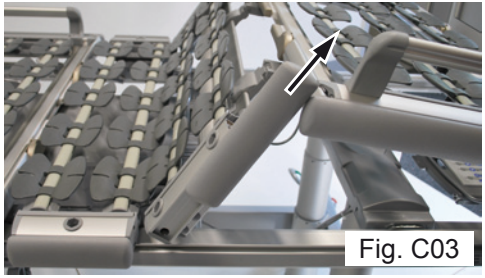


Fig. C03

Installation in reverse order.

Head and foot section

This section contains exploded views and assembly parts lists which are divided into corresponding individual parts.

CONTENTS

Head and foot section design variant S 📖 124
Aluminium corner tube 📖 126

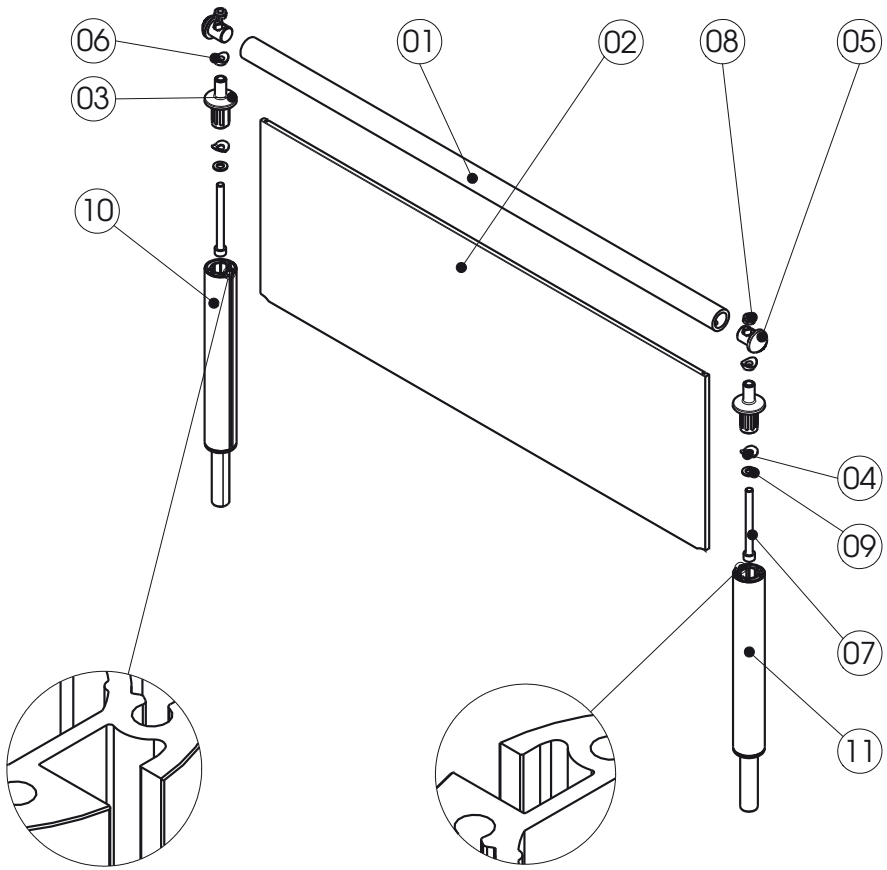
Head and foot section design variant MA (variant) 📖 127

Head and foot section design variant MB (variant) 📖 128

Head and foot section | Head and foot section design variant S 1/2

Head and foot section design variant S
for lying surface 90 cm;
BG541-01

Item	Art. No.	Article	Qty
01	AP798	Aluminium hand rail	1
02	HPL216	Head plate	1
03	KT262-01	Tube cap Ø45	2
04	F1439	Clamp plate	2
05	KT264	Spherical end cap	2
06	KT266-01	Washer	2
07	SR517	Cylinder head screw M10x110	2
08	SR139	Lock nut M10	2
09	SR2260	Washer	2
10	BG231	Aluminium corner tube, right	1
11	BG232	Aluminium corner tube, left	1

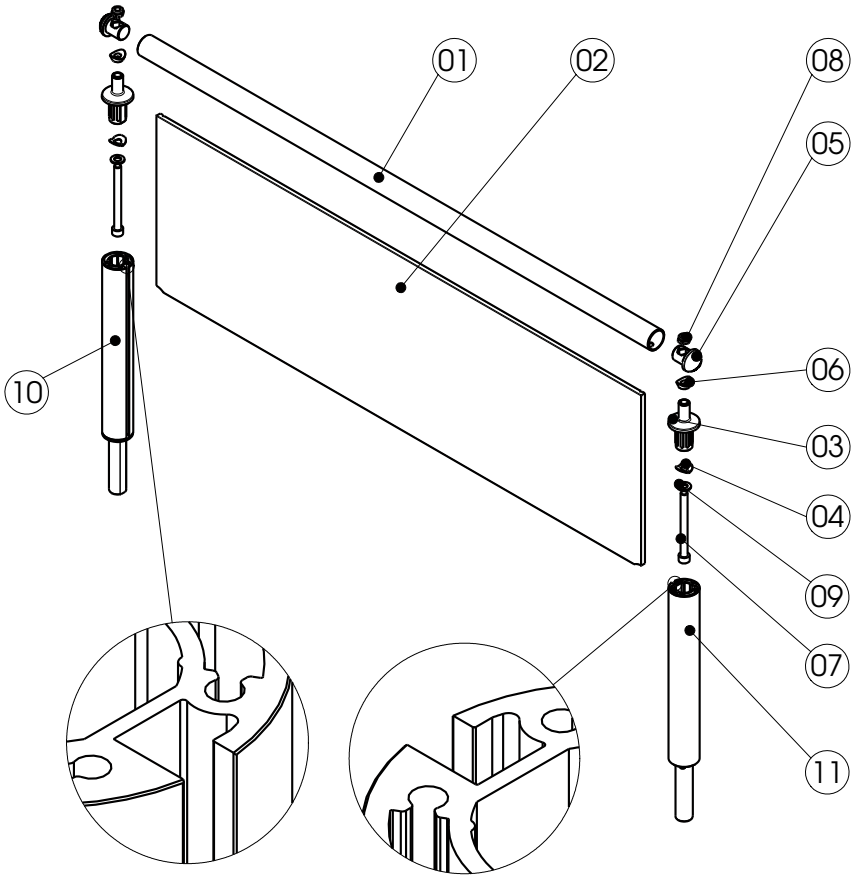


When ordering head or foot sections, please indicate the colour code or ID number of the bed.

Head and foot section | Head and foot section design variant S 2/2

Head and foot section design variant S
for lying surface 100 cm;
BG562

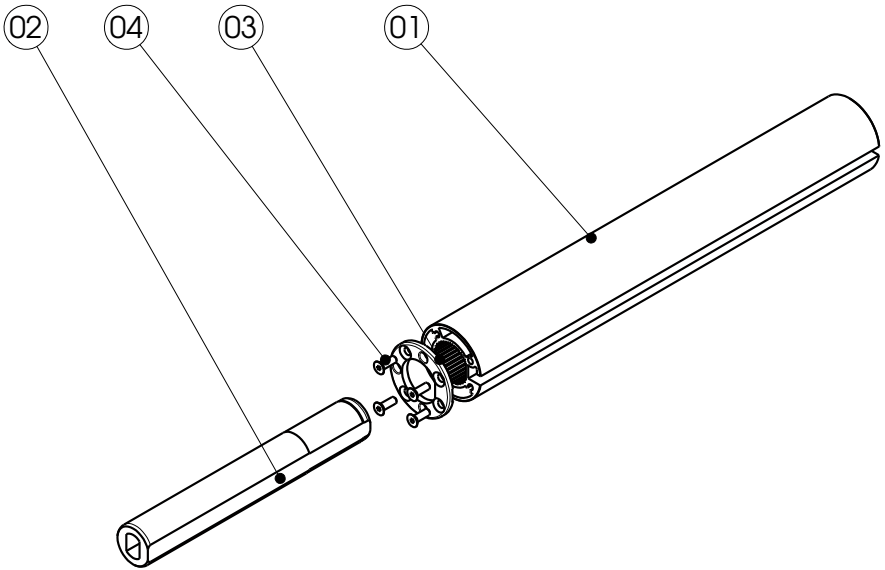
Item	Art. No.	Article	Qty
01	AP838	Aluminium hand rail	1
02	HPL235	Head plate	1
03	KT262-01	Tube cap Ø45	2
04	F1439	Clamp plate	2
05	KT264	Spherical end cap	2
06	KT266	Washer	2
07	SR517	Cylinder head screw M10x110	2
08	SR139	Lock nut M10	2
09	SR2260	Washer	2
10	BG231	Aluminium corner tube, right	1
11	BG232	Aluminium corner tube, left	1



When ordering head or foot sections, please indicate the colour code or ID number of the bed.

Aluminium corner tube;
BG232 (left), BG231 (right)

Item	Art. No.	Article	Qty
01	AP770	Corner tube	1
02	AP771	Locking pin	1
03	KT265	End disk	1
04	SR534	Countersunk screw M4x12	4



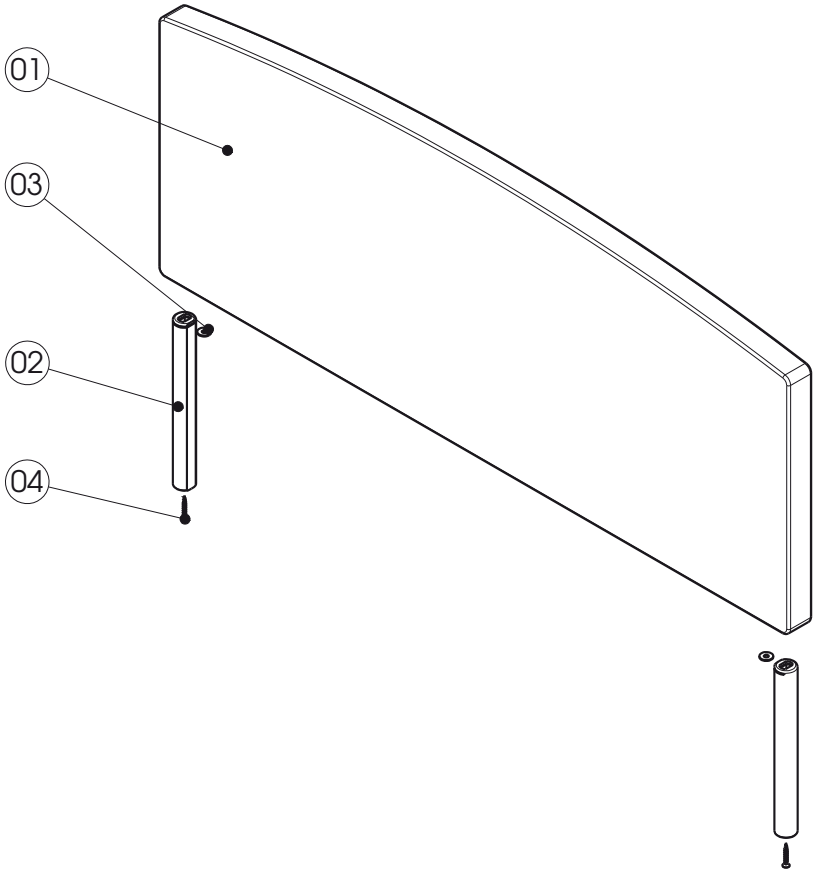
Head and foot section | Head and foot section design variant MA (variant)

Head and foot section design variant MA (variant)
for lying surface 90 cm;
BG3326

Item	Art. No.	Article	Qty
01	H3385	Head and foot section	1
02	F2400-02	Plug-in tube	2
03	SR2275	Washer	2
04	SR2274	Chipboard screw 4.5x30	2

Head and foot section design variant MA (variant)
for lying surface 100 cm;
BG3329

Item	Art. No.	Article	Qty
01	H3387	Head and foot section	1
02	F2400-02	Plug-in tube	2
03	SR2275	Washer	2
04	SR2274	Chipboard screw 4.5x30	2



When ordering head or foot sections, please indicate the colour code or ID number of the bed.

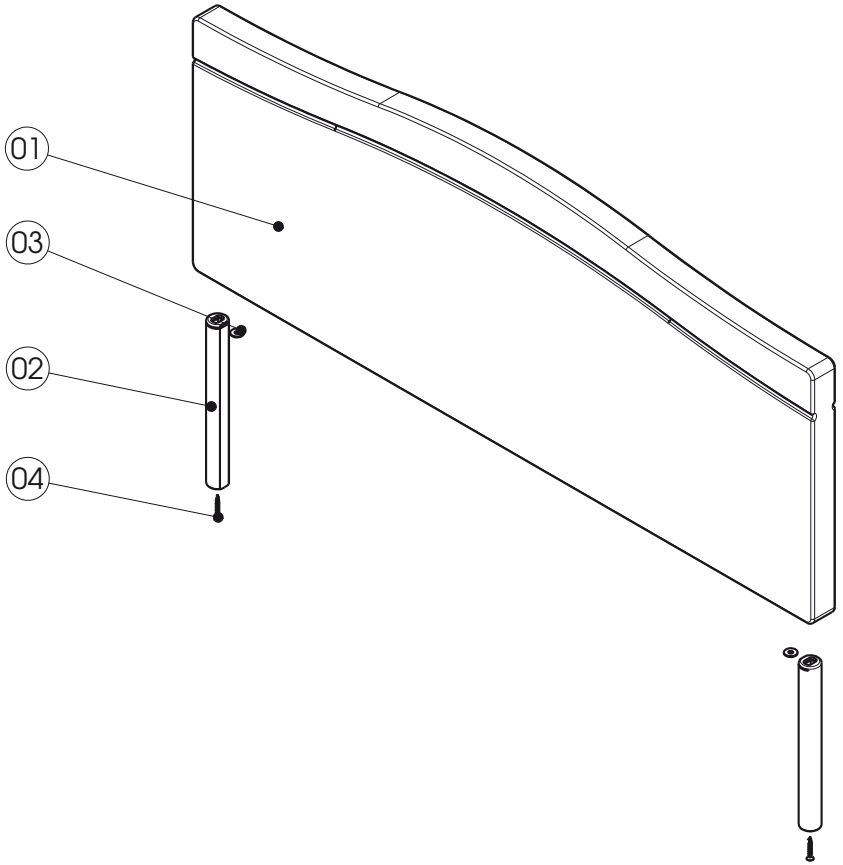
Head and foot section | Head and foot section design variant MB (variant)

Head and foot section design variant MB (variant)
for lying surface 100 cm;
BG3327

Item	Art. No.	Article	Qty
01	H3386	Head and foot section	1
02	F2400-02	Plug-in tube	2
03	SR2275	Washer	2
04	SR2274	Chipboard screw 4.5x30	2

Head and foot section design variant MB (variant)
for lying surface 100 cm;
BG3330

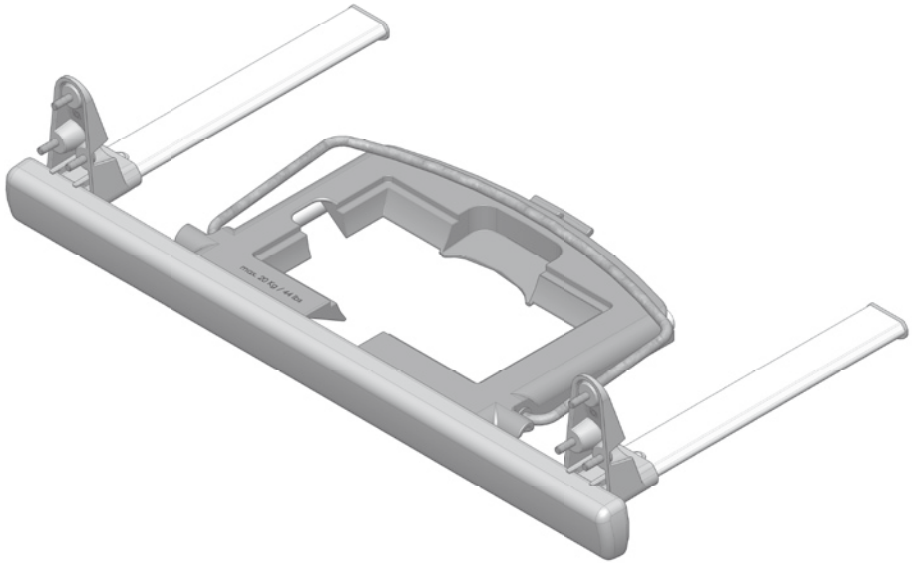
Item	Art. No.	Article	Qty
01	H3388	Head and foot section	1
02	F2400-02	Plug-in tube	2
03	SR2275	Washer	2
04	SR2274	Chipboard screw 4.5x30	2



When ordering head or foot sections, please indicate the colour code or ID number of the bed.

Bed linen storage area

This section contains exploded views and assembly parts lists which are divided into corresponding individual parts.



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Bed linen storage area
from year of construction 04/2010
📖 130

Bed linen storage area
from year of construction 03/2011 📖 131

Guide 📖 132

Bed linen storage area
from year of construction 04/2010 - 02/2011
📖 133

Bed linen storage area to year of construction 03/2010
📖 134

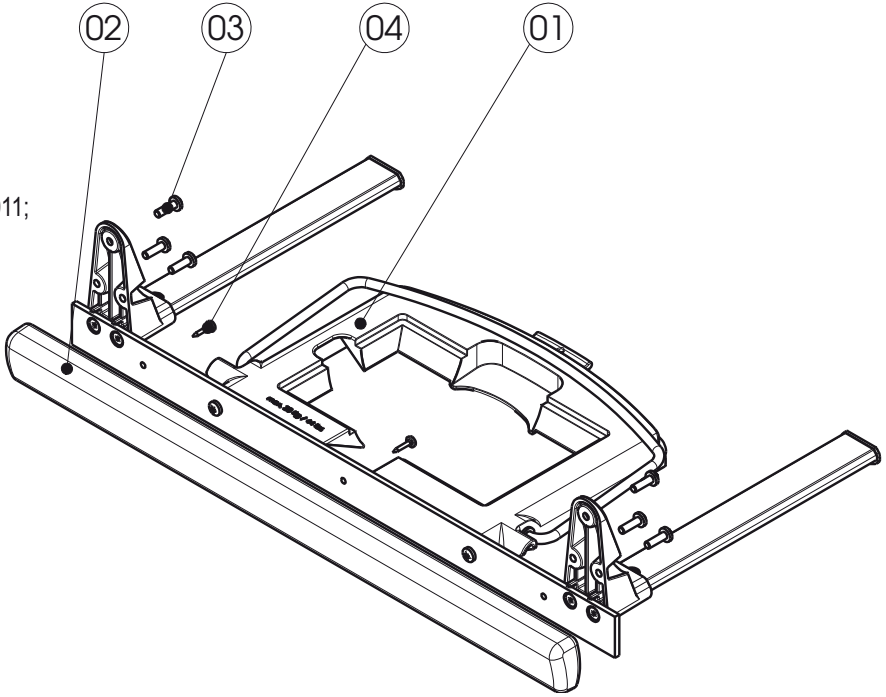
Bed linen storage area | Bed linen storage area from year of construction 04/2010

Bed linen storage area, from year of construction 03/2011;
BG2931

Item	Art. No.	Article	Qty
01	BG2968-04	Bed linen storage area	1
02	KT2728	Cover	1
03	SR2213	Thread tapping screw M6x20	6
04	SR2062	Chipboard screw 5x20	3

Bed linen storage area, from year of construction 04/2010 - 02/2011;
BG2931

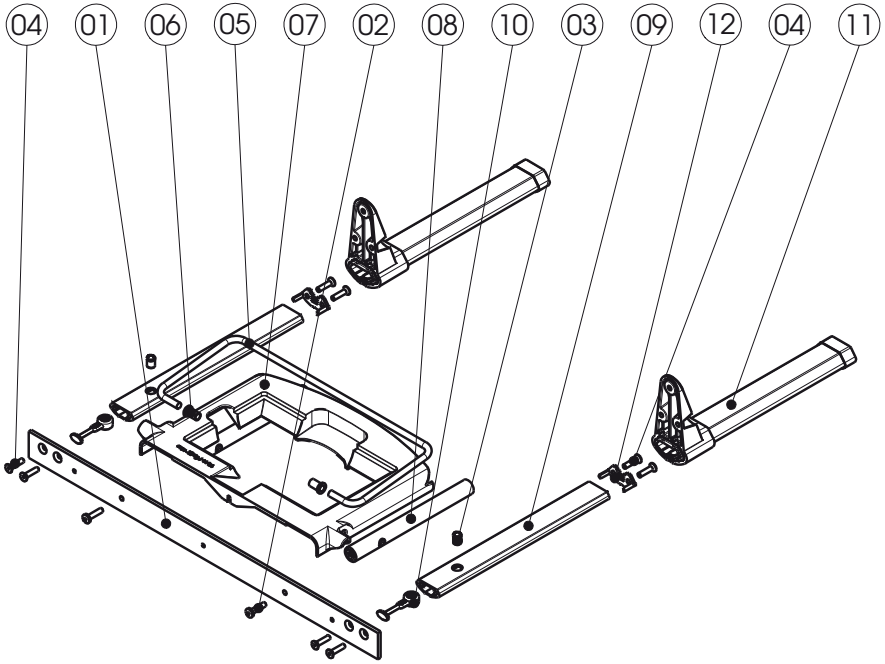
Item	Art. No.	Article	Qty
01	BG2968-01	Bed linen storage area	1
02	KT2728	Cover	1
03	SR2213	Thread tapping screw M6x20	6
04	SR2062	Chipboard screw 5x20	3



When ordering bed linen storage areas, please indicate the colour code or ID number of the bed.

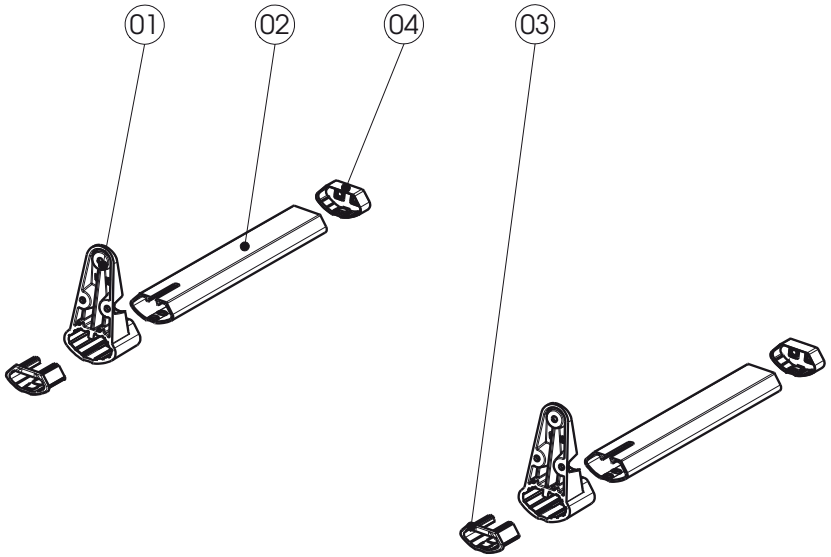
Bed linen storage area, from year of construction 03/2011;
BG2968-04

Item	Art. No.	Article	Qty
01	F3402	Holding plate, bed linen storage area	1
02	SR2214	Thread tapping screw M6x25	2
03	SR2450	Federndes Druckstück	2
04	SR751	Countersunk screw M6x20	8
05	F3269	Bed linen storage area, folding clip	1
06	B006	Insulating sheath	2
07	KT2729-02	Bed linen storage area, insert	1
08	AP2975	Bed linen storage area, guide tube	2
09	AP3305	Bed linen storage area, guide rail	2
10	KT2807	Bed linen storage area, spring support	2
11	BG4185	Bed linen storage area, guide	1
12	KT2943	Bed linen storage area, limit stop	2



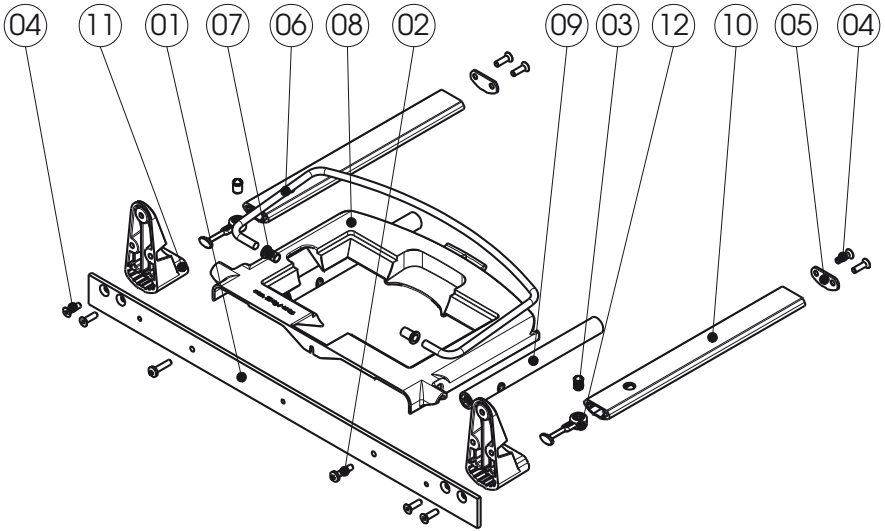
Bed linen storage area, from year of construction 03/2011;
BG4185

Item	Art. No.	Article	Qty
01	KT2908	Bed linen storage area, guide	2
02	AP3306-01	Guide profile	2
03	KT1193-01	Guide, upper	2
04	KT3060	Bed linen storage area, cover cap	2



Bed linen storage area, from year of construction 04/2010 - 02/2011;
BG2968-01

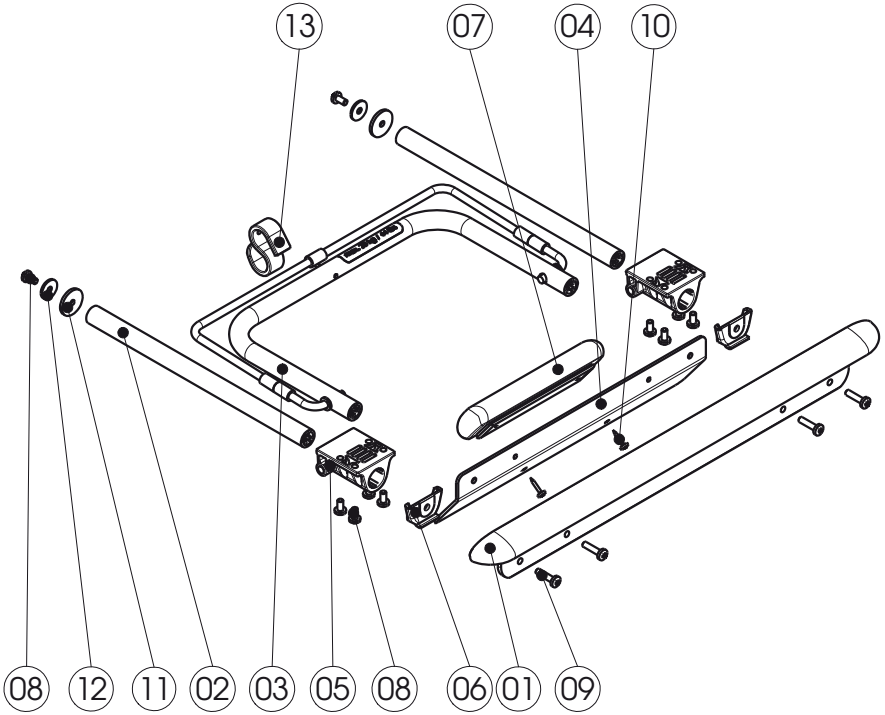
Item	Art. No.	Article	Qty
01	F2966-01	Holding plate, bed linen storage area	1
02	SR2214	Thread tapping screw M6x25	2
03	SR2450	Spring pressure piece	2
04	SR751	Countersunk screw M6x20	8
05	KT2727	Bed linen storage area, limit stop	2
06	F3004	Bed linen storage area, folding clip	1
07	B006	Insulating sheath	2
08	KT2729-01	Bed linen storage area, insert	1
09	AP2975	Bed linen storage area, guide tube	2
10	AP2974	Bed linen storage area, guide rail	2
11	KT2647-01	Bed linen storage area, guide	2
12	KT2807	Bed linen storage area, spring support	2



Bed linen storage area | Bed linen storage area to year of construction 03/2010

Bed linen storage area, to year of construction 03/2010;
BG1402-01

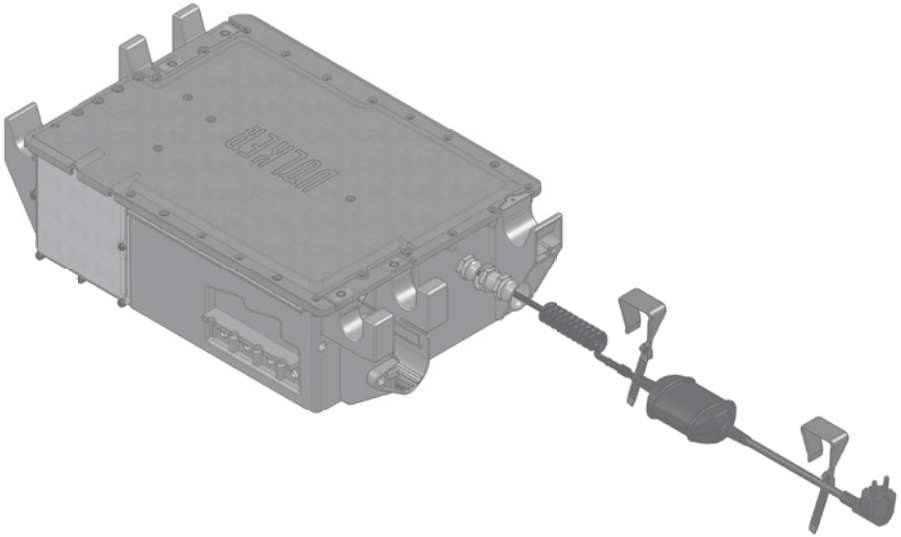
Item	Art. No.	Article	Qty
01	BG1126	Bumper	1
02	AP2305	Bed linen storage area, guide tube	2
03	BG1678	Support clip	1
04	F2297	Nurse keypad, area for location	1
05	KT2094	Bed linen storage area, guide	2
06	KT2121-01	Guide latch	2
07	KT2238	Nurse keypad, holder	1
08	SR300	Thread tapping screw M6x12	10
09	SR467	Thread tapping screw M6x25	4
10	SR022	Round head screw HecoFixPlus 5x20	2
11	SR2087	Washer 6.4x30x3	2
12	SR116	Washer	2
13	KT327-01	Keypad support	1



When ordering bed linen storage areas, please indicate the colour code or ID number of the bed.

Electronics

This section contains exploded views and assembly parts lists which are divided into corresponding individual parts as well as a description of how to replace the parts.



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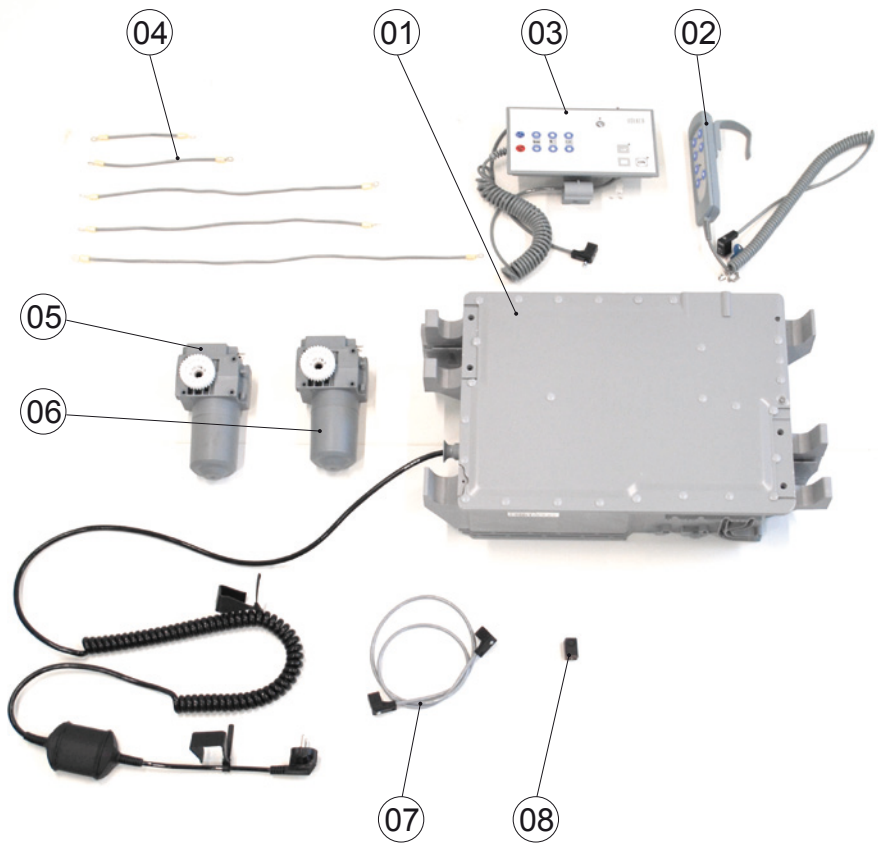
- Spare parts 🕮 138
- Replacing the dual drive DA01 🕮 139
- Replacing the battery pack 🕮 141

Hand control and nurse keypads 🕮 142

Electronic dual drive DA01

Item	Art. No.	Article	Qty
01	BG2608	Dual drive DA01 D DK *(Variants 🕮 137)*	1
02	E2174-01	Hand control, Comfort with hook *(Options 🕮 142)*	1
03	E2208-01	Nurse keypad with complete lock *(Options 🕮 142)*	1
04	BG484	Potential connection	1
05	BG2374-01	Height adjustment drive HV02, head	1
06	BG2375-01	Height adjustment drive HV02, foot	1
07	K547	Connecting cable DA HV	2
08	E529-01	Blind plug	1
	E413	Cable clip	3
	VDS	Völker Diagnostic System (VDS)	1
	BG3422	Assembly aid DA01	1



Dual drive DA01;
BG2608

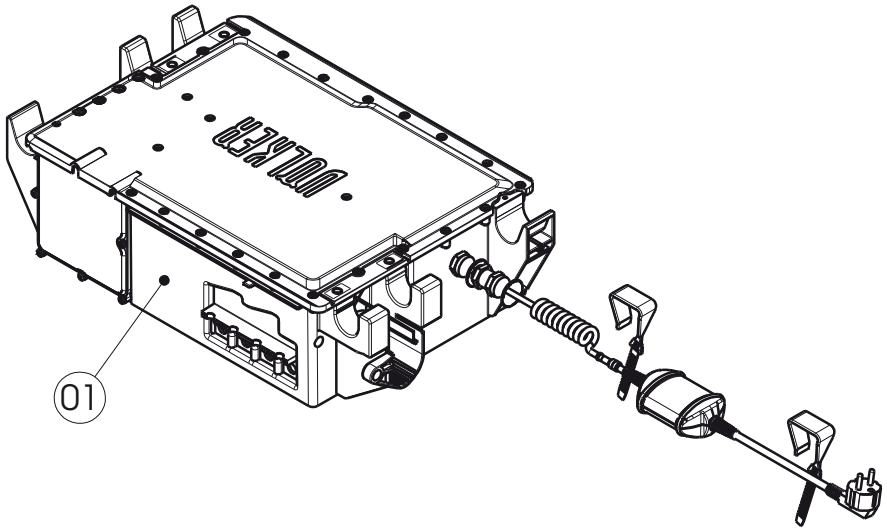
Item	Art. No.	Article	Qty
01	BG2608	Dual drive DA01 D DK *(Variants, see below)*	1

Key

Abbreviation	Designation
DA01	Dual drive DA01
DK	Double click
4HS	Extension board

Variants

Country variant	Distributor board	Art. No.	Article
D	No	BG2608	DA01 D DK
D	Yes	BG2610	DA01 D 4HS DK
F	No	BG2648	DA01 F
F	Yes	BG2649	DA01 F 4HS
CH	No	BG2670	DA01 CH DK
CH	Yes	BG2671	DA01 CH 4HS DK
AUS	No	BG2692	DA01 AUS DK
AUS	Yes	BG2693	DA01 AUS 4HS DK
UK	No	BG2722	DA01 UK DK
UK	Yes	BG2723	DA01 UK 4HS DK
BRA (230 V)	No	BG3530	DA01 BRA DK
BRA (230 V)	Yes	BG3531	DA01 BRA 4HS DK
BRA (110 V)	No	BG2744	DA01 J/BRA DK
BRA (110 V)	Yes	BG2745	DA01 J/BRA 4HS DK
USA	No	BG2766	DA01 USA
USA	Yes	BG2767	DA01 USA 4HS

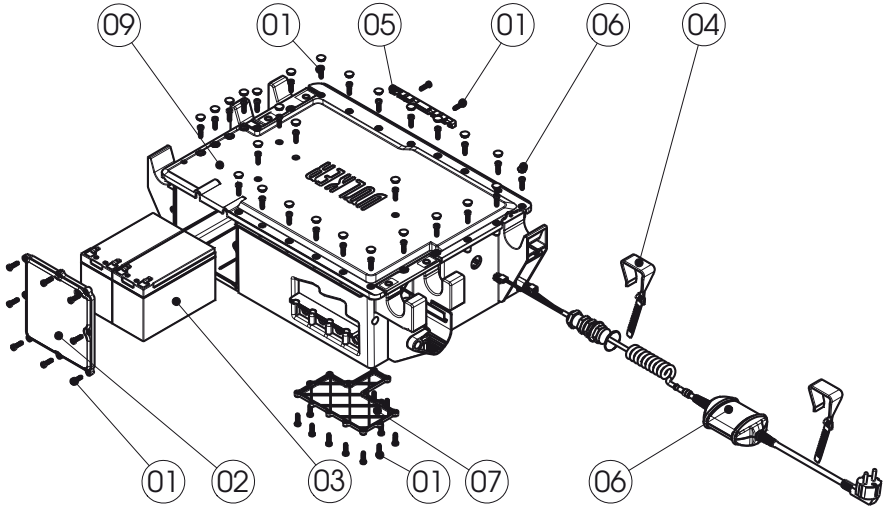


Dual drive DA01, spare parts

Item	Art. No.	Article	Qty
01	SR725	Mushroom head screw M4x20	52
02	BG2527	Battery cover	1
03	E2022	Battery 12V 7.2 Ah	2
04	KT2669	Cable hook	2
05	KT2565	Clamping strip	1
06	KT2718	Cover cap	28
07	K2107	Mains cable, NFS coils, protected 230V *(Variants, see below)*	1
08	KT493	Cover, distributor rail	1
09	KT2713	Housing cover	1
	KT2590-03	Design, cover *(to year of construction fall 2010)*	1

Variants, mains cable

Country variant	Art. No.	Article
D / F	K2107	Mains cable, NFS coils, protected
CH	K2120	Mains cable, NFS coils, EU
UK	K2134	Mains cable, NFS coils, UK
USA	K2127	Mains cable, NFS coils, US
BRA	K2154	Mains cable, NFS coils, BRA
AUS	K2113	Mains cable, NFS coils, AUS



Dual drive DA01 removal

01. Tools required (Fig. 01).
02. Connect Gateway or VDS (Völker Diagnostic System), (if present) (Fig. 02) and make sure of settings, if necessary.
03. Raise bed with horizontal lying surface (Fig. 03).
04. Unscrew all connections (Fig. 04).
05. Uncouple CPR (Fig. 05).
06. Remove cable clip (Fig. 06).

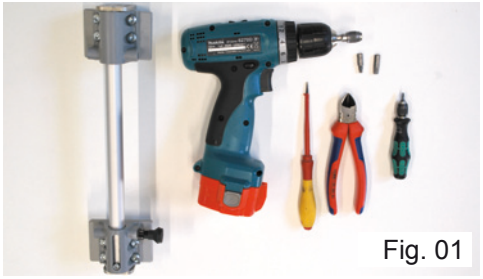


Fig. 01

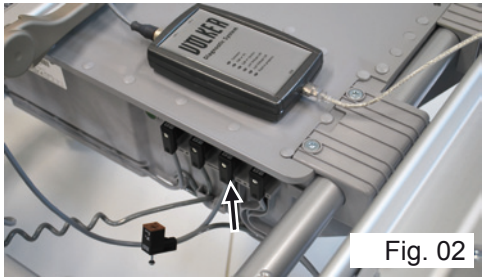


Fig. 02

Fig. 03

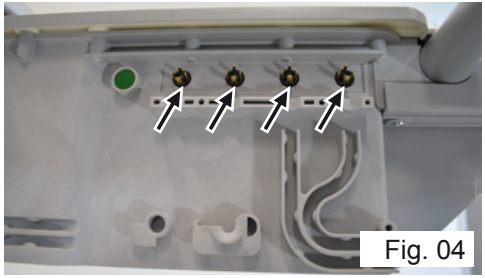


Fig. 04

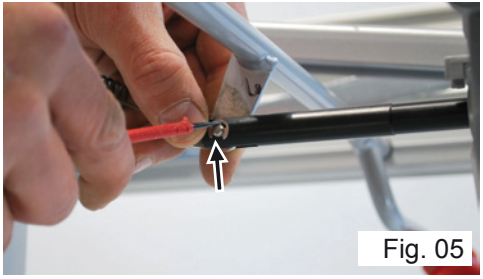


Fig. 05

Fig. 06

07. 1. Remove stain relief (Fig. 07).
08. 2. Remove stain relief (Fig. 08).
09. Open stain relief (Fig. 09).
10. Remove screws (Fig. 10).
11. Apply Völker assembly aid DA01 (not in the centre) and remove small clamps (Fig. 11).
12. Remove first large clamp and lower dual drive. Then remove the second large clamp and remove the dual drive DA01 downwards (not illustrated).
13. Installation in reverse order (not illustrated).

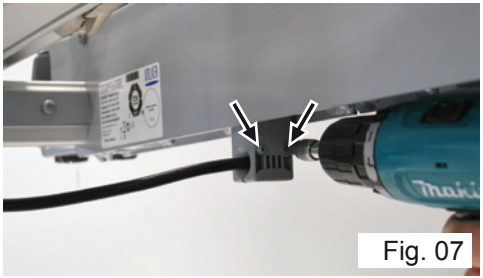


Fig. 07

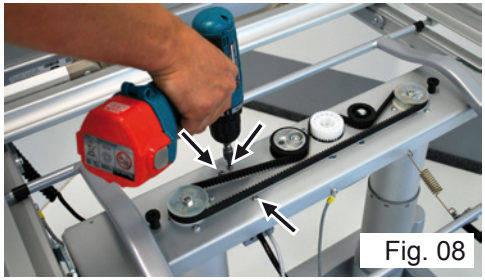


Fig. 08

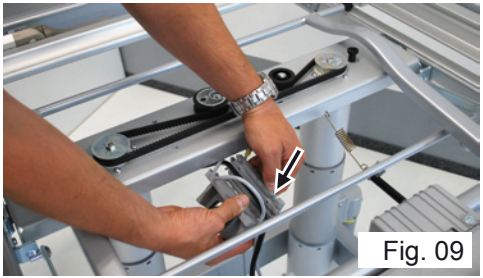


Fig. 09

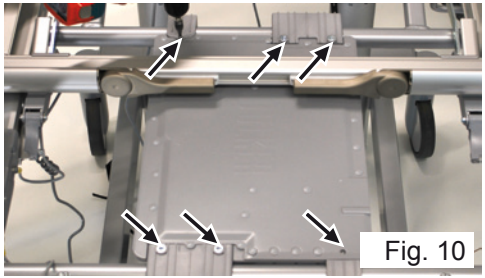


Fig. 10

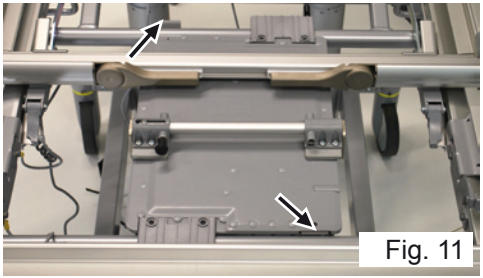


Fig. 11

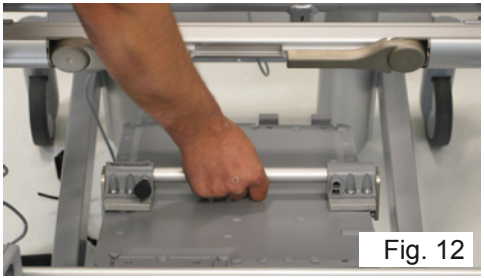


Fig. 12

01. Unscrew battery cover from dual drive DA01 housing (Fig. 01).
02. Remove battery pack and remove connecting plug (Fig. 02).
03. Installation in reverse order.

⚠ **WARNING** Before carrying out repair work, always pull out the mains plug and disconnect the bed from the battery pack by pressing the green reset button on the dual drive!

After finishing the work, plug in the mains connector again and press the mains activation button again.

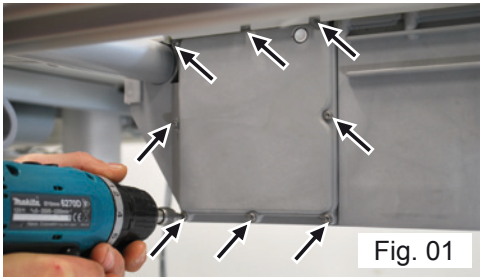


Fig. 01

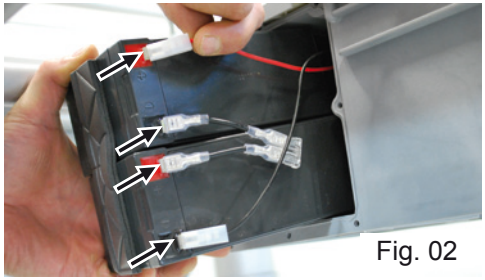


Fig. 02

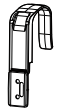
Hand control

Item	Art. No.	Article	Qty
Standard	E2174-01	Hand control, Comfort with hook	1
Option	E2175-01	Hand control, Comfort crosswise with clip	1
Option	E2240-01	Hand control, Auto-Contour with hook	1
Option	E2241-01	Hand control, Auto-Contour crosswise with clip	1
Option	E2176-01	Hand control with lower leg function with hook	1
Option	E2177-01	Hand control with lower leg function crosswise with clip	1

Nurse keypad

Item	Art. No.	Article	Qty
Standard	E2208-01	Nurse keypad with complete lock	1
Option	E2209-01	Nurse keypad with individual lock	1
Option	E2207-01	Nurse keypad with individual lock and automatic functions	1
Option	E2206-01	Nurse keypad with individual lock, automatic functions and lower leg function	1

Hand control hook

	Art. No.	Article
	KT2486-01	Hand control hook, longitudinal
	KT2487	Hand control, crosswise

Nurse keypad hook

	Art. No.	Article
	KT2204	Hook for nurse keypad (for beds in design variant S)
	KT2401-05	Hook for nurse keypad (for beds in design variant MA and MB)

NOTE The article numbers of your hand control or your nurse keypad can be found on the rear of these.

Maintenance

The **Maintenance** section contains information on how to carry out maintenance work.

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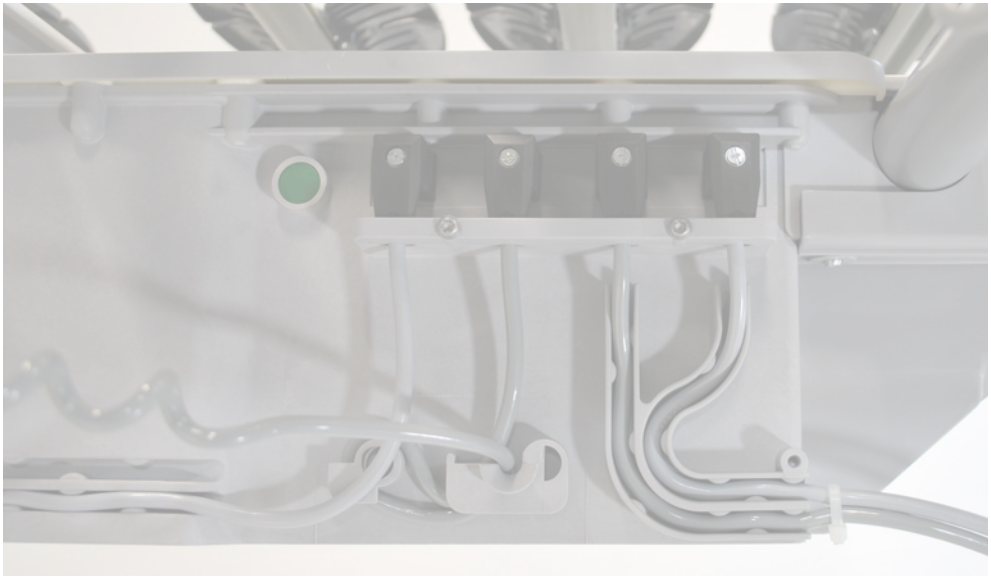
Staff training 🕮 144

Safety notes 🕮 145

Maintenance schedule 🕮 146



Staff training

Every person involved with maintenance or servicing must at least

- have taken part in service training by Völker
- have read the safety notes and
- the service manual

and be qualified in accordance with MPBetreibV sections 4 and 6. To avoid errors and ensure that our beds work properly, these documents must always be accessible to service personnel.

Before commencing maintenance work, the service manual and the instructions for use must be read in full by the person responsible for carrying out the servicing.

Safety notes

During maintenance and technical checks, the following specifications must be strictly observed:

- The room's electrical installations must satisfy current technical requirements and the bed must be used correctly.
- The castors must be placed in the "brake position".
- The beds are not protected against explosion and must therefore only be maintained in an environment free from flammable substances and materials.

⚠ **WARNING** Before carrying out repair work, always pull out the mains plug and disconnect the bed from the battery pack by pressing the green reset button on the dual drive!

⚠ **WARNING** Maintenance and repair work should only be carried out after the bed has been disinfected.

⚠ **WARNING** Maintenance and repair work should only be carried out on an unoccupied bed. The patient may also have to be transferred to another bed before the work.

⚠ **WARNING** After maintenance (repair) work is complete, always check that the bed is functioning correctly. It must be checked that the bed can be used correctly without risk to the patient or care personnel.

⚠ **WARNING** When working on the open motor, it must be ensured that there is no contact with the power supply board for at least 20 minutes after disconnecting it from the power supply **and** the battery. The reason for this is to allow self-discharge of the smoothing capacitor, which would represent a risk to persons.

⚠ **WARNING** When connecting a motor to the extension board, it must be noted that only 1 motor may be connected.

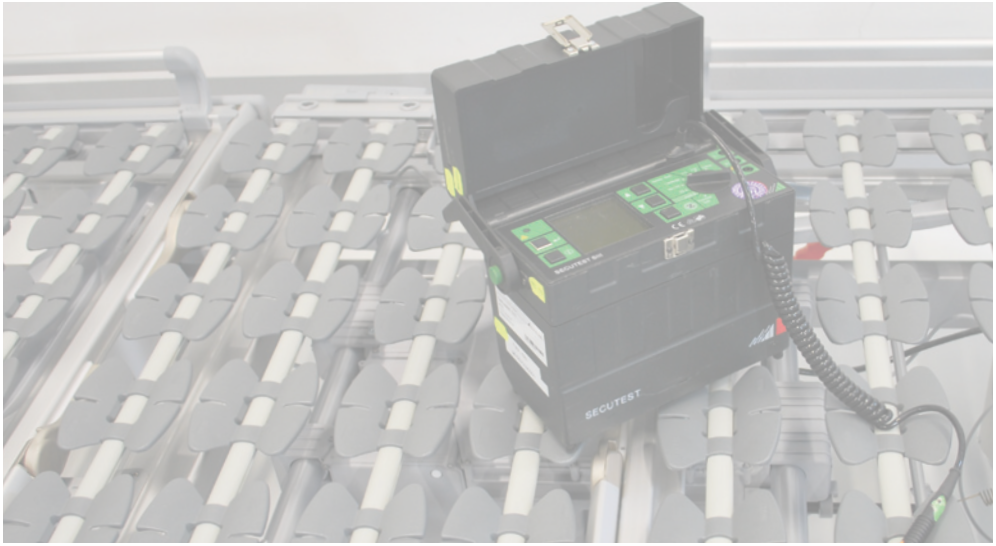
The bed requires little maintenance. All movable parts for the height adjustment mechanism, the lying surface motor systems and the side rails are provided with long-lasting lubricant at the factory. It is recommended that **the bed is subjected to a regular, or at least once a year, technical check** 🕮 147 **(including visual inspection and functional check) as described in the checklist** 🕮 174 and any damage uncovered as a result, such as signs of wear and tear, loose screws or breaks/fractures, be eliminated immediately.

After every lengthy period of non-use, a technical check 🕮 147 must be carried out.

Period	Work to be carried out
Annually and after lengthy periods of non-use	Technical check 🕮 147
As required	Lubrication of mechanical parts, replacement of wearing parts • Wings (if fitted) • Spring elements (if fitted)
Every 3-5 years	Replace the battery pack

Technical check

The section entitled **Technical check** contains all the information needed to carry out the technical check in accordance with MPBetreibV, BGVA3, UVV on hospital and care beds and measurement as per DIN EN 62353 (formerly VDE 0751-1). Other (e.g. country-specific) specifications have not been included here. This does not absolve the operator from the obligation to observe any such specifications.



CONTENTS

Visual inspection 📖 148

Functional check of the side rails 📖 148

Functional check of the brakes 📖 150

Functional check of the drives 📖 150

Mains connection cable 📖 150

Cabling 📖 150

Housing 📖 150

Mechanical check 📖 150

Measuring in accordance with DIN EN 62353 (formerly VDE 0751-1) 📖 150

Checking the trapeze bar grab handle 📖 151

Further accessories 📖 151

Technical check 1/4

1. Visual inspection

Check the frame parts for plastic deformations and/or wear and tear. These include the lower frame, the lifting mechanism, all parts of the lying surface (back, seat, upper leg and lower leg sections, wings and spring elements (if fitted)), trapeze bar, trapeze bar holder and castors.

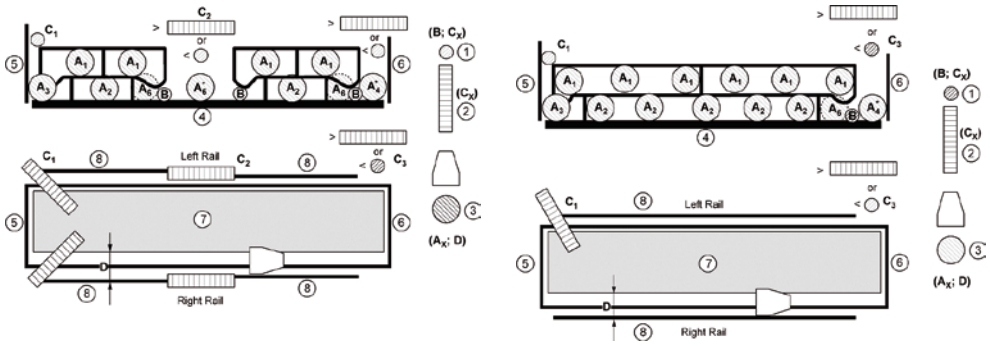
2. Functional check of the side rails

The side rails must be checked in accordance with IEC/FDIS 60601-2-52 or DIN EN 60601-2-38. Please see the declaration of conformity supplied with the bed for which of the two standards should be used.

Inspection in accordance with IEC/FDIS 60601-2-52

Check that the locking mechanism for the side rails is working correctly and that there are no visible deformations or signs of wear and tear on the side rails.

Check that the prescribed distances are maintained, even when the side rails are placed under load. All measurements of



Letter	Description	Dimension
A_x	The distance between elements within the scope of the SIDE RAIL in its raised/engaged position or of the area formed by the SIDE RAILS and the fixed parts of the BED or ACCESSORIES.	< 120 mm
B	Not applicable!	-
C_1	Distance between HEAD SECTION and SIDE RAIL	< 60 mm
$C_{2.3}$	Distance between divided SIDE RAIL and distance between SIDE RAIL and FOOT SECTION	< 60 mm or > 318 mm
D	Area between SIDE RAIL and MATTRESS	120 mm cone may sink max. 60 mm under the mattress surface without pressure
G	Height of the upper edge of the SIDE RAILS over the mattress without compression over at least 1/2 of the length of the LYING SURFACE	≥ 220 mm

the side rail distances should be made in the flat lying surface position, since the dimensions given while the bed is otherwise positioned do not show less favorable conditions.

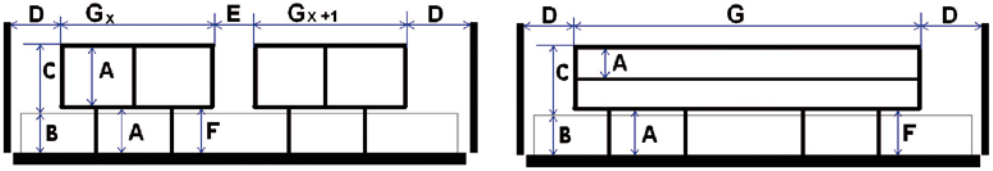
The measurement of A and D must be performed using a cone as defined in IEC/FDIS 60601-2-52. The force used for measurement A must be at least 250 N.

Inspection in accordance with DIN EN 60601-2-38

Check that the locking mechanism for the side rails is working correctly and that there are no visible deformations or signs of wear and tear on the side rails.

Check that the prescribed distances are maintained, even when the side rails are placed under load. All measurements of side rail distances must be carried out in the flat lying surface position.

The measurement of A must be performed using a cone as defined in DIN EN 60601-2-38. The force used for measurement A must be at least 50 N.



Letter	Description	Dimension
A	The greatest distance between the elements within the scope of the SIDE RAIL in a raised / engaged position or the area formed by the SIDE RAILS and fixed parts of the BED.	≤120 mm
B	Thickness of the mattress for CORRECT USE	Defined by the manufacturer
C	Height of the upper edge of the SIDE RAILS over the mattress (see "B") without compression	≥220 mm
D	Distance between the HEAD or FOOT SECTION and the SIDE RAIL	≤60 mm or ≥235 mm
E	Distance between the separated SIDE RAIL with the LYING SURFACE in flat position	≤60 mm or ≥235 mm
F	Distance of all accessible openings between the SIDE RAILS and the LYING SURFACE	If D or E ≥235 mm then F ≤60 mm If D or E ≥60 mm then F ≤120 mm
G	Total length of the SIDE RAIL or sum of the length of the divided SIDE RAILS on one side of the BED	∑ Gx ≥1/2 the length of the LYING SURFACE

Technical check 3/4

3. Functional check of the brakes

Check the functionality of the brake (safety, brake, straight ahead, free-wheeling).

4. Functional check of the motors

Travel through the full adjustment range of each motor. Look out for any unusual noises, watching the speed, ease of running etc., and check that the selected function travels in the correct direction. Particularly ensure that the motor switches off automatically when it reaches its terminal position*.

* Please note that the terminal position can vary from bed model to bed model. Please consult the technical specifications for this, or if in doubt, contact our service department.

5. Mains connection cable

Check

- the mains connection cable, including cable guides,
- the strain relief, including kink protection sleeve,
- the mains connection plug and
- the cable hooks

for damage.

6. Cabling

Check the cable guides and that the plug connectors are correctly seated and do not exhibit any damage.

Check the cables for damage.

7. Housing

Check all housings for damage. All screws must be firmly tightened and seals must not exhibit any visible damage.

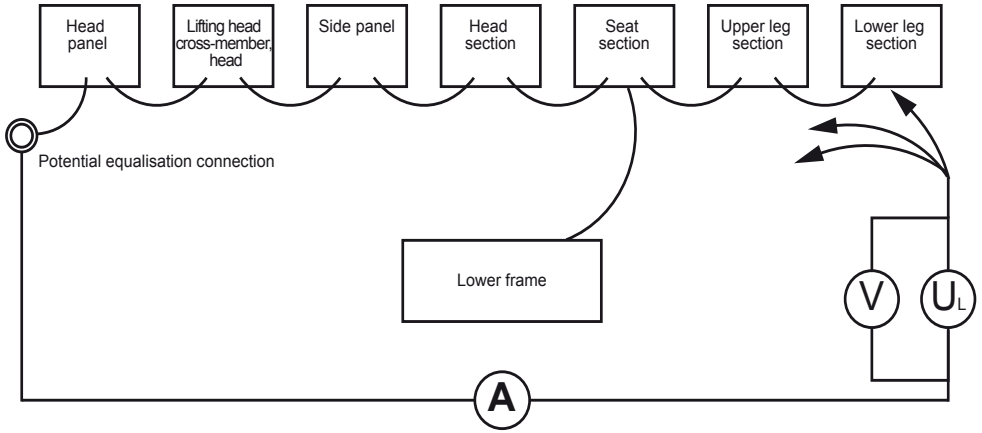
8. Mechanical check

Check the function of the hydrolift by manually moving the lower leg section to the individual positions (only if there is no optional electric adjustment available).

9. Measuring in accordance with DIN EN 62353 (formerly VDE 0751-1)

The bed must be checked electrically in accordance with DIN EN 62353 (formerly VDE 0751-1). The leakage current should be measured by means of alternative measurement. The max. measured value must be less than or equal to 500 µA.

On beds with a potential equalisation connection (see diagram below), the impedance of the potential equalisation within the bed must also be measured. The impedance must be less than 0.2 Ω (I=5…25 A, R=U/I < 0.2 Ω).



10. Trapeze bar grab handle

Check whether the plastic and holding frame of the trapeze bar grab handle exhibit any damage and that the fixing rods on the trapeze bar are intact.

The handle of the trapeze bar, including the fastening strap, must be replaced in the following cycle:

- Every 5 years: handles and handles with roll function in nursing homes
- Every 3 years: handles with roll function in hospitals

11. Further accessories

Further accessories must always be checked in accordance with the manufacturer's instructions.

Troubleshooting

The section entitled **Troubleshooting** contains a table, together with information on the fault localisation.

CONTENTS

Table of faults 🕮 153

Troubleshooting | Table of faults 1/3

The following table contains information on potential functional faults. The causes of such faults can be improper use or wear. These functional faults can cause injury to patients and staff.

Anyone responsible for carrying out maintenance and repair work must at least have received service training from Völker, have read the safety notes and the service manual and be qualified in accordance with MPBetreibV sections 4 and 6.

NOTE Before carrying out any troubleshooting, turn the nurse keypad on and ensure that the battery pack is charged (observe the LED of the battery display on the nurse keypad) and that the bed is connected to the mains supply (the mains plug is in a live socket).

⚠ **WARNING** Before carrying out any repair work, ensure that the bed has been disconnected from the power supply and from the battery pack, by pressing the reset button.

If the same fault occurs repeatedly, use the diagnosis tool to read out the error memory before resetting the Völker Diagnostic System (VDS) again.

The Völker Diagnostic System

Targeted use of the Völker Diagnostic System for continuous maintenance, servicing and monitoring of Völker clinic and nursing home beds secures availability, reduces bound capital, guarantees a documentation and history in line with requirements and permanently available and thus safeguards the investment material and its value retention.

You can obtain further information on the Völker Diagnostic System (art. no.: VDS) and the corresponding training from your contact at Völker.

Fault	Possible cause	Troubleshooting
Adjustment of the lying surface (back, upper leg and lower leg section) not functioning.	(1) Hand control locked.	(1) Unlock hand control.
	(2) Nurse keypad not switched on.	(2) Switch on nurse keypad.
	(3) Individual function locked by the nurse keypad.	(3) Unlock individual function on the nurse keypad.
	(4) The hand control is faulty.	(4) Replace hand control.
	(5) Nurse keypad faulty.	(5) Replace nurse keypad.
	(6) Lying surface or power supply defective.	(6) Replace dual drive for the lying surface adjustment.
	(7) The mains plug is not plugged in or there is no power to the socket and battery pack is discharged.	(7) Connect the plug or check the socket.
	(8) Bed taken out of service.	(8) Press the green button on the mains isolation switch [1] 🕮 30 and then actuate any function on the hand control.
The bed cannot be adjusted in height.	(1) Hand control locked.	(1) Unlock hand control.
	(2) Nurse keypad not switched on.	(2) Switch on nurse keypad.
	(3) Individual function locked by the nurse keypad.	(3) Unlock individual function on the nurse keypad.
	(4) The hand control is faulty.	(4) Replace hand control.

☞ *Continued on next page.*

Troubleshooting | Table of faults 3/3

Fault	Possible cause	Troubleshooting
The bed cannot be adjusted in height.	(5) Nurse keypad faulty.	(5) Replace nurse keypad.
	(6) Lift motor defective.	(6) Replace lift motor.
	(7) Power supply defective.	(7) Replace dual drive.
	(8) The mains plug is not plugged in or there is no power to the socket and battery pack is discharged.	(8) Connect the plug or check the socket.
	(9) Bed taken out of service.	(9) Press the green button on the mains isolation switch [1] 🕮 30 and then actuate any function on the hand control.
Bed is difficult to push.	(1) Castor defective.	(1) Replace castor.
	(2) Directional castor defective.	(2) Replace directional castor.
Battery LED lights up red and and does not flash after pressing the green button on the mains isolation switch and then actuating any function.	(1) Battery pack faulty.	(1) Replace battery pack.
	(2) Charging connection faulty.	(2) Replace dual drive

[1] The mains isolation switch ensures that when no electrical function is being actuated, there is no mains voltage to the bed. (Exception: while the battery pack is being charged and when the nurse keypad is activated. This is shown by the LED in the mains voltage display.)

Appendix

The **Appendix** section contains technical information, manufacturer's declarations and forms.

Konformitätserklärung
Anhang VII
EU-Richtlinie 93/42/EWG

Der Unterzeichnende
Völker GmbH
Wullener Feld 79
58454 Witten

mit einer Fertigungsstätte unter der Adresse:
Völker GmbH
Ahornstraße 4
09661 Hainichen

bestätigt, dass die nachfolgend bezeichneten Produkte in der von uns in Verkehr gebrachten Ausführung die grundlegenden Anforderungen des Anhangs I der EU-Richtlinie 93/42/EWG erfüllen. Es wurden die folgenden Normen angewendet :

DIN EN 60601-1:2007-07,
DIN EN 60601-1-2:2007-12,
DIN EN 60601-1-4:1996+A1:1999.

Declaration of conformity
Appendix VII
EU Directive 93/42/EEC

The signatory
Völker GmbH
Wullener Feld 79
58454 Witten/Germany

with a manufacturing side at:
Völker GmbH
Ahornstraße 4
09661 Hainichen/Germany

confirms that the products described below and in the form distributed by ourselves meet the basic requirements of Appendix I of EU Directive 93/42/EEC. The following standards are applied :

DIN EN 60601-1:2007-07,
DIN EN 60601-1-2:2007-12,
DIN EN 60601-1-4:1996+A1:1999,
DIN EN 60601-2-52:2010-12.

Déclaration de conformité
Annexe VII
Directive EU 93/42/CEE

La soussignée
Völker GmbH
Wullener Feld 79
58454 Witten/Allemagne

avec un site de production à:
Völker GmbH
Ahornstraße 4
09661 Hainichen/Allemagne

confirme que les produits spécifiés ci-dessous sont conformes, dans le modèle mis en circulation, aux exigences fondamentales de L'annexe L de la directive européenne 93/42/CEE. Les standards suivants sont appliqués :

DIN EN 60601-1:2007-07,
DIN EN 60601-1-2:2007-12,
DIN EN 60601-1-4:1996+A1:1999.

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Spare part order 🕮 157

Tool list 🕮 157

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Dimension print S 962-2 🕮 164

Service life/disposal 🕮 165

Manufacturer's declarations, forms, electronic service manual 🕮 166

Spare part order

Use the form Spare Part Order 📖 175 for ordering.

It is essential to fill out the from fully when ordering.

- The model designation and
- identification number of your bed

are located on the type label 📖 162 on the inside of the head panel.

You can find the spare part you are looking for quickly and easily in the exploded views of the individual assemblies in this service manual. The further data required for the order can then be found in the parts list.

- Number
- Article number
- Designation of the article.

If you have a bed with different dimensions (see original order documents), it is possible that the replacement parts may also differ from the standard. Please clearly indicate the deviations when you order replacement parts.

Tool list

- Combination spanner SW 13
- Key SW 13
- Hexagon socket spanner 8 mm
- Screwdriver, short version
- Cordless screwdriver
- Set screw bits, Torx
- Set screw bits, cross recess
- Set screw bits, hexagonal socket
- Side cutter
- Rubber hammer
- Pipe wrench
- Völker assembly aid DA01 (Article number: BG3422)

Service points

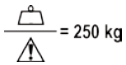
If necessary, please seek assistance from the relevant contact at your nearest sales organisation. You will receive all the information you need for comprehensive service promptly.

Appendix | Symbols used

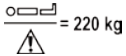
Warning symbols Information marked with this symbol must always be read and strictly observed!

Warning about the risk of crushing and entrapment!

Note the information in the instructions for use!



Safe working load 250 kg



Max. permissible weight of the patient 220 kg (approx. 30 kg for the mattress, trapeze bar and accessories)

Direct current

Alternating current

Protection class II device, protection-insulated

Type B device as per DIN EN 60601-1

The product satisfies the fundamental requirements of Appendix 1 of EU Directive 93/42/EEC.

The product must be disposed of in accordance with EU Directive 2002/96 pertaining to old electrical and electronic equipment.

Appendix | Technical data (standard design) 1/2

The details marked below with * are dependent on the length, width or model of the bed. The values specified relate to model S 962-2 as design version S.

External dimensions (W x L) for lying surface 90 x 190 cm * for lying surface 90 x 200 cm * for lying surface 90 x 210 cm * for lying surface 100 x 190 cm * for lying surface 100 x 200 cm * for lying surface 100 x 210 cm * for lying surface 110 x 200 cm *	 approx. 99 x 209 cm approx. 99 x 219 cm approx. 99 x 229 cm approx. 109 x 209 cm approx. 109 x 219 cm approx. 109 x 229 cm approx. 119 x 219 cm
Clearance height *	approx. 19 cm
Height of the lower edge of lying surface frame (min./max.) *	approx. 26.5 cm / 66.5 cm
Height of the upper edge of the lying surface (min./max)*	approx. 40 cm / 80 cm
Height of upper edge of head and foot section (min./max.)*	approx. 76.5 cm / 116.5 cm
Height of the centre of vertical wall spacing roll (min./max.) *	approx. 34.7 cm / 74.7 cm
Height of the centre of horizontal wall spacing roll (min./max.) *	approx. 32.7 cm / 72.7 cm

Lying surface (4-part) *	approx. 90 x 190/200/210 cm approx. 100 x 190/200/210 cm approx. 110 x 200 cm
Volumetric weight of the mattress material	40-50 kg/m^3
Unladen weight S 962-2 *	approx. 150 kg
Safe working load for the bed	250 kg As a result of the weight (approx. 30 kg) of the mattress, trapeze bar and other accessories, the maximum permissible patient weight is 220 kg. If another mattress is used or other accessories, this value must be recalculated!
Safe working load for the trapeze bar holder	75 kg
Safe working load for drip stands	2 kg / hook

Appendix | Technical data (standard design) 2/2

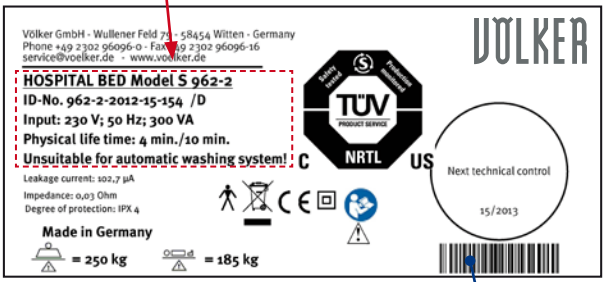
Castors S 962-2	4 pcs, Ø 150 mm
Max. castor load Steel castors Integral castors (optional) Dual castor (optional)	 100 kg (dynamic) 150 kg (dynamic) 150 kg (dynamic)
Mains voltage Nominal power Nominal frequency	AC 230 V (EU version) AC 240 V (UK version) AC 115 V (US version) 300 VA 50 Hz (EU, UK version) 60 Hz (US version)
Primary fuse	3.15 A (EU version) 5.0 A (UK version) 6.3 A (US version)
Battery pack	Type: 2 x 12 V block battery (lead gel) 7.2 Ah
Operating temperature range	+ 10 °C to + 40 °C
Transport / storage temperature range	- 20 °C to + 60 °C
Air humidity	30% to 75% rel.
Atmosphere range	700 hPa to 1060 hPa

Protection against electric shock	Protection class II or device with internal electrical current source
Protection type by housing as per EN 60529	IPX4 not suitable for cleaning in automatic washing systems
Degree of protection of the applied part against electric shock as per DIN EN 60601-1	Type B
Degree of protection against explosive substances and mixtures	The bed is not protected against explosion and should not be used in an environment in which flammable anesthetics or flammable cleaning agents are present (see brochure from accident prevention organisation ZH 1/200)
MPG grouping	Class I

Mode of operation	Int. 4 min. / 10 min. Duty time max. 4 min. Sleep time 10 min.
Technical check	1x yearly

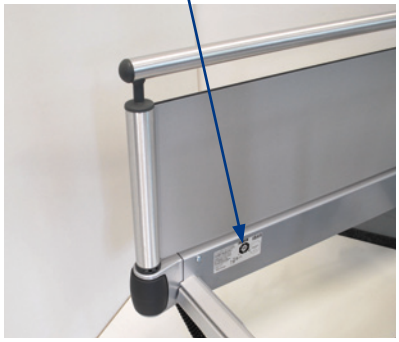
Appendix | Type label 1/2

Type specifications



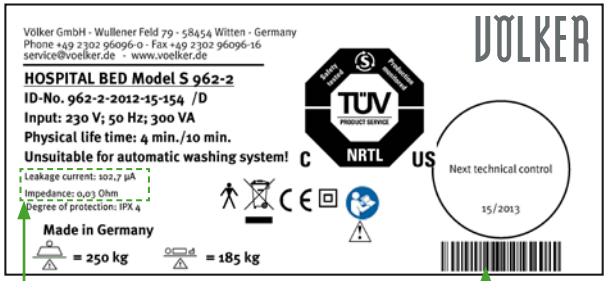
The type label is located on the inside of the head panel.

Raise the back section to read the type label.



Type specifications	Declaration
1st line	Model designation. In the example: HOSPITAL BED Model S 962-2
2nd line	ID-No. (made up as follows): S 962-2 = Model -2012 = Year of construction -8 = Production week (calendar week) -212 = Consecutive number D = Mains plug version (e.g. D = Germany)
3rd line	Input: mains voltage; mains frequency; power consumption
4th line	Physical life time: Max. uninterrupted on-time of electric motor adjustment. In the example: 4 min./10 min. This means that the bed may be operated with the electric motor without interruption for max. 4 minutes, after which a pause of 10 minutes will be necessary (protection against overheating).
5th line	Safe working load (accessories, mattress and weight of patient).
6th line	Suitability for automatic washing systems. In the example: unsuitable for automatic washing systems.

Appendix | Type label 2/2

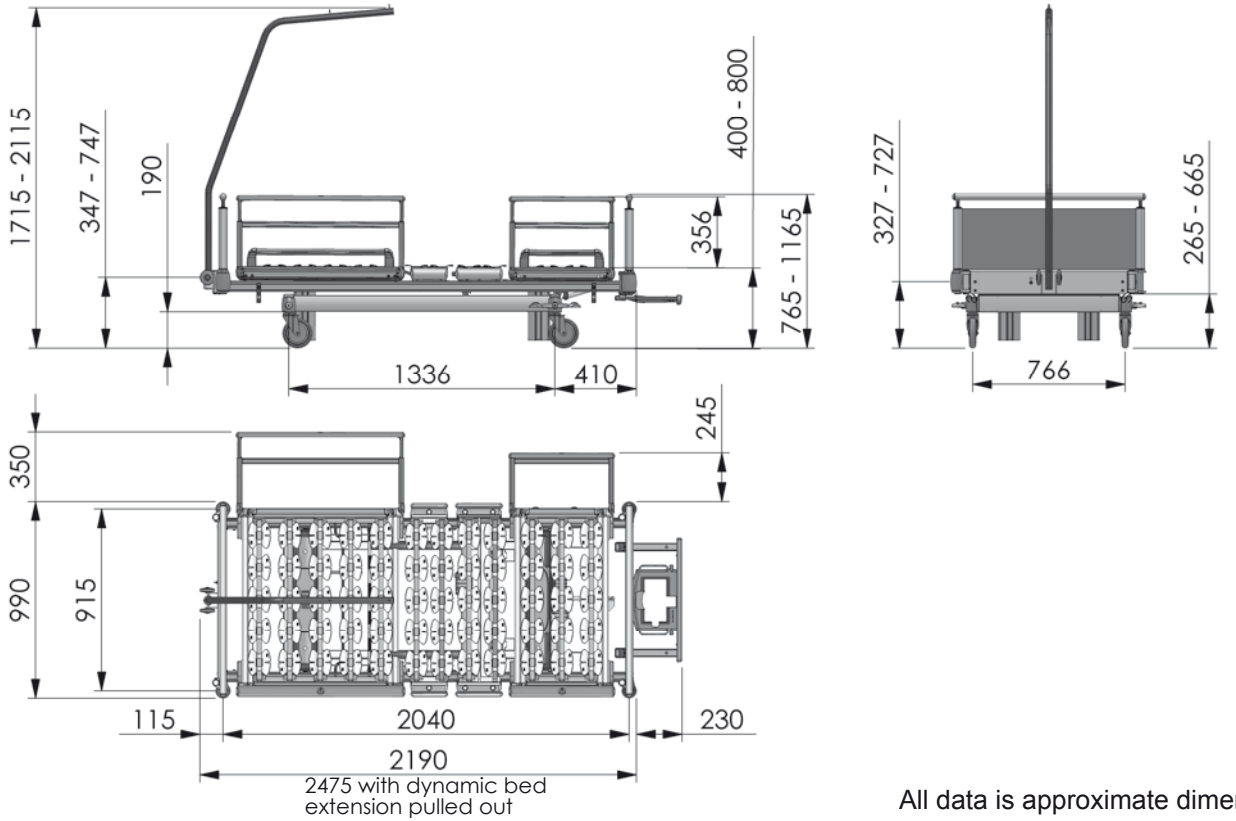


Measured values	Declaration
1st line	Equivalent unit current leakage in µA
2nd line	Potential equalisation impedance in Ω (Ohm)

The specified initial measured values were measured in accordance with EN 62353 (formerly VDE 0751-1).

The barcode (code 39) contains the numeric ID No. (10 digits).

Appendix | Dimension print S 962-2



All data is approximate dimensions in mm.

Appendix | Service life/disposal

The bed's expected service life is approx. 10 years. To ensure environmentally responsible disposal after decommissioning, please contact your responsible area sales manager.

Appendix | Manufacturer's declarations, forms, electronic service manual

Manufacturer's declarations

- Declaration of conformity 🕮 167
- Table 201 – Guidelines and manufacturer's declaration – Electromagnetic compatibility (6.8.3.201 a) 3)) 🕮 168
- Guidelines and manufacturer's declaration – Electromagnetic compatibility (6.8.3.201 a) 6)) 🕮 169
- Table 204 – Guidelines and manufacturer's declaration – Electromagnetic compatibility for all devices and systems that are not life-sustaining (6.8.3.201 b)) 🕮 171
- Table 206 - Recommended protected distance between portable and mobile HF telecommunications equipment and the bed – for devices and systems that are not life-sustaining (6.8.3.201 b)) 🕮 173

Forms

- Technical check of Völker hospital and healthcare beds in accordance to German standards and safety regulations incl. measurements required 🕮 174
- Spare part order 🕮 175

Electronic service manual

- Prerequisite, for use of the electronic service manual 🕮 176

VÖLKER

Konformitätserklärung / Declaration of Conformity / Déclaration de conformité

Konformitätserklärung
Anhang VII
EU-Richtlinie 93/42/EWG

Der Unterzeichnende
Völker GmbH
Wullener Feld 79
58454 Witten

mit einer Fertigungsstätte unter der Adresse:
Völker GmbH
Ahornstraße 4
09661 Hainichen

bestätigt, dass die nachfolgend bezeichneten Produkte in der von uns in Verkehr gebrachten Ausführung die grundlegenden Anforderungen des Anhangs I der EU-Richtlinie 93/42/EWG erfüllen. Es wurden die folgenden Normen angewendet :

DIN EN 60601-1:2007-07,
DIN EN 60601-1-2:2007-12,
DIN EN 60601-1-4:1996+A1:1999,
DIN EN 60601-2-52:2010-12.

Damit sind die Anforderungen des Medizinproduktegesetzes zur Anbringung einer **CE Kennzeichnung** erfüllt.

Bei einer nicht mit dem Hersteller abgestimmten Änderung des Produktes verliert diese Konformitätserklärung ihre Gültigkeit.

Bezeichnung der Produkte :
Klinikbetten S 962-2, S 962-2 Vis-a-Vis, S 962-2W, S 862-2, S 862-2W.

EG-Richtlinien :
Richtlinie 93/42/EWG vom 14.06.1993 über Medizinprodukte (Anhang I „Grundlegende Anforderungen").
Die Produkte sind Produkte der Klasse I gemäß Anhang IX der Richtlinie 93/42/EWG vom 05.09.2007.

Declaration of conformity
Appendix VII
EU Directive 93/42/EEC

The signatory
Völker GmbH
Wullener Feld 79
58454 Witten/Germany

with a manufacturing side at:
Völker GmbH
Ahornstraße 4
09661 Hainichen/Germany

confirms that the products described below and in the form distributed by ourselves meet the basic requirements of Appendix I of EU Directive 93/42/EEC. The following standards are applied :

DIN EN 60601-1:2007-07,
DIN EN 60601-1-2:2007-12,
DIN EN 60601-1-4:1996+A1:1999,
DIN EN 60601-2-52:2010-12.

The requirements of the medical products law pertaining to the display of a **CE seal** of approval are thereby fulfilled.

This declaration of conformity becomes invalid if the products are altered without the agreement of the manufacturer.

Description of products Type/Article No.:
Hospital beds S 962-2, S 962-2 Vis-a-Vis, S 962-2W, S 862-2, S 862-2W.

EU Directives :
Directive 93/42/EEC of 14.06.1993 concering medical products (Appendix I, Basic requirements). The design and construction of this product conforms to Class I (Appendix IX) Directive 93/42/EEC of 05.09.2007.

Déclaration de conformité
Annexe VII
Directive EU 93/42/CEE

La soussignée
Völker GmbH
Wullener Feld 79
58454 Witten/Allemagne

avec un site de production à:
Völker GmbH
Ahornstraße 4
09661 Hainichen/Allemagne

confirme que les produits spécifies ci-dessous sont conformes, dans le modèle mis en circulation, aux exigences fondamentales de L'annexe L de la directive européenne 93/42/CEE.
Les standards suivants sont appliqués :

DIN EN 60601-1:2007-07,
DIN EN 60601-1-2:2007-12,
DIN EN 60601-1-4:1996+A1:1999,
DIN EN 60601-2-52:2010-12.

Les exigences de la loi sur les produits médicaux concernant leport de la **marque CE** sont ainsi satisfaites.

Cette déclaration de conformité est invaledée en cas de modification des produits, non autorisée par le fabricant.

Désignation des produits
Modèle/Référence :
Lits hospitaliers S 962-2, S 962-2 Vis-a-Vis, S 962-2W, S 862-2, S 862-2W.

Directives européennes :
Directive 93/42/CEE du 14.06.1993 sur les produits médicaux (annexe I « Exigences fondamentales »). La conception du produit est conforme à la classe I (annexe IX) Directive 93/42/CEE du 05.09.2007.

Witten, 20.02.2012

Mitchel Tidman
Geschäftsführer / Managing Director / Gérant

Info
You can find a printable version of this document on the Internet at www.voelker.de.

Table 201 - Guidelines and manufacturer's declaration - Electromagnetic compatibility

(6.8.3.201 a) 3))

The bed is intended for use in the electromagnetic environment as described below. The customer or user of the bed should ensure that it is used in such an environment.

Emissions measurements	Conformity	Electromagnetic environment - guideline
HF emissions IEC 61000-3-2	Class A	The bed is suitable for use in all institutions, including residential areas and such that are directly connected to a public mains supply network that also supplies buildings intended for residential purposes.
Fluctuations in voltage / flicker IEC 61000-3-3	Conforms	
RF emissions CISPR 14 – 1	Conforms	The bed is not suitable for connection to other equipment.

Guidelines and manufacturer's declaration - Electromagnetic compatibility (6.8.3.201 a) 6))			
The bed is intended for use in the electromagnetic environment as described below. The customer or user of the bed should ensure that it is used in such an environment.			
Compatibility check	**IEC 60601 Testing level**	**Conformity level**	**Electromagnetic environment - guideline**
Discharge of static electricity (ESD) IEC 61000-4-2	± 6 kV contact discharge ± 8 kV air discharge	± 6 kV contact discharge ± 8 kV air discharge	The ground should be made of wood or concrete and be laid with ceramic tiles. If the ground is covered with synthetic material, the relative air humidity must be at least 30%.
Rapid transient electrical disturbance / bursts IEC 61000-4-4	± 2 kV for voltage supply ± 1 kV for input and output cables	± 2 kV for voltage supply Not applicable	The quality of the voltage supply should be commensurate with a typical commercial or hospital environment.
Surge voltages IEC 61000-4-5	± 1 kV series mode voltage ± 2 kV common-mode voltage	± 1 kV series mode voltage Not applicable	The quality of the voltage supply should be commensurate with a typical commercial or hospital environment.

☞ *Continued on next page.*

Compatibility check	IEC 60601 Testing level	Conformity level	Electromagnetic environment - guideline
Voltage drops, short interruptions and voltage fluctuations in the mains voltage supply IEC 61000-4-11	< 5 % U_T (>95 % voltage peaks in U_T) for 0.5 cycles 40 % U_T (60 % dip in U_T) for 5 cycles 70 % U_T (30 % dip in U_T) for 25 cycles < 5 % U_T (>95 % dip in U_T) for 5 sec	< 5 % U_T (>95 % voltage peaks in U_T) for 0.5 cycles 40 % U_T (60 % dip in U_T) for 5 cycles 70 % U_T (30 % dip in UT) for 25 cycles < 5 % U_T (>95 % dip in U_T) for 5 sec	The quality of the voltage supply should be commensurate with a typical commercial or hospital environment. If the user requires continued function from the bed when interruptions in the power supply occur, it is recommended that the bed be powered via an uninterruptible power supply or a battery.
Magnetic field at supply frequency (50/60 Hz) IEC 61000-4-8	3 A/m	3 A/m	Magnetic fields at mains frequency should correspond to the typical values present in commercial and hospital environments.
Remark 1: U_T is the mains AC voltage before the testing level is applied.			

Table 204 – Guidelines and manufacturer's declaration – Electromagnetic compatibility for all devices and systems that are not life-sustaining (6.8.3.201 b))

The bed is intended for use in the electromagnetic environment as described below. The customer or user of the bed should ensure that it is used in such an environment.

Compatibility check	IEC 60601 Testing level	Conformity level	Electromagnetic environment - guideline
Conducted HF disturbances IEC 61000-4-6	3 Vrms 150 kHz to 80 MHz	3 V	Portable and mobile radio equipment should not be used any closer to the bed, or their cables, than the recommended protective distance which is calculated based on the equation applicable for the transmission frequency. **Recommended protective distance** $d = 1.17\sqrt{P}$ 150 kHz to 80 MHz $d = 1.17\sqrt{P}$ 80 MHz to 800 MHz $d = 2.33\sqrt{P}$ 800 MHz to 2.5 GHz

☞ *Continued on next page.*

Compatibility check	IEC 60601 Testing level	Conformity level	Electromagnetic environment - guideline
Radiated HF disturbances IEC 61000-4-3	3 V/m 80 MHz to 2.5 GHz	3 V/m	Where *P* is the rated output of the transmitter in Watts (W) as specified by the transmitter manufacturer and *d* is the recommended protective distance in metres (m). The field strength of stationary radio transmitters should be less than the conformity level[b] at all frequencies, as verified by an on-site test[a]. Disturbance is possible in the environment of equipment that bears the following label.
Remark 1: At 80 MHz and 800 MHz, the higher frequency range applies. Remark 2: These guidelines may not be applicable in all cases. The spread of electromagnetic parameters is influenced by the absorption and reflection of buildings, objects and people.			
[a] The field strength of stationary transmitters, such as base stations of cordless telephones and mobile land radio, amateur radio stations, AM and FM radio and TV stations cannot be quantified in theory in advance accurately. To determine the electromagnetic environment in relation to a stationary transmitter, a study of the site should be considered. If the measured field strength at the site where the bed is used exceeds the conformity levels stated above, the bed should be observed to ensure that it functions correctly. If unusual features are observed, additional measures may be required, such as modified alignment or a different location for the bed. [b] In the frequency range from 150 kHz to 80 MHz, the field strength should be less than 3 V/m.			

Table 206 - Recommended protective distance between portable and mobile HF telecommunications equipment and the bed – for devices and systems that are not life-sustaining (6.8.3.201 b))

The bed is intended for operation in an electromagnetic environment in which HF disturbances are controlled. The customer or user of the bed can help to avoid electromagnetic disturbances by respecting the minimum distance between portable and mobile HF telecommunications equipment (transmitters) and the bed. The recommended minimum distance d is dependent on the maximum power output of the communication device (see below).

Rate output of the transmitter W	Protective distance according to the frequency of the transmitter m		
	150 kHz to 80 MHz $d = 1.17\sqrt{P}$	80 MHz to 800 MHz $d = 1.17\sqrt{P}$	800 MHz to 2.5 GHz $d = 2.33\sqrt{P}$
0.01	0.12	0.12	0.23
0.1	0.37	0.37	0.74
1	1.17	1.17	2.33
10	3.69	3.69	7.38
100	11.67	11.67	23.33

For transmitters whose maximum rated output is not specified in the table above, the recommended protective distance *d* in metres (m) can be calculated using the equation in the column that features *P* as the maximum power output of the transmitter in Watts (W) as defined by the transmitter manufacturer.

Remark 1: At 80 MHz and 800 MHz, the higher frequency range applies.

Remark 2: These guidelines may not be applicable in all cases. The spread of electromagnetic parameters is influenced by the absorption and reflection of buildings, objects and people.

Technical check of Völker hospital and healthcare beds in accordance to German standards and safety regulations incl. measurements required

Project, address, customer no.:					
Type of bed, product, location of the bed:					
Bed Identification (e.g. facilities own identification or Völker ID-no.):					
Date of check:		Name of technician:			
Kind of check	**Component to be checked**	**Anually**	**Accepted**	**Not accepted**	**Not applicable**
Visual inspection	Inscription on device readable				
	Instructions for use available				
	Base frame	B*			
	Lying surface, wing and spring elements (if existing)	B*			
	Trapeze bar adapter, infusion bar adapter	B*			
	Power supply cable, plug or charger, charging connection	B*			
	Strian relieve, bend protection, cable hook	B*/S*			
	Connecting cable, plug-in contacts, blind plugs	B*/S*			
	Positioning (spacing 1 mm) and sensor cabling (only Vis-a-Vis-bed)	B*/S*			
	Housing (motor, control electronics)	B*			
	Hand control (housing, cable)	B*			
	Nurse keypad, nurse hand control (housing, cable)	B*			
	Trapeze bar, assist rail spacer (side rail centre), additional accessories	B*/F*			
	Transverse motors and cover, head and foot ends	B*			
	Castors	B*			
	Wall buffer wheel (if existing)	B*			
	Side rails including telescopic section, if applicable	B*			
	HiLow-elevation: check screw locking (only for 5380)	S*			
Functional inspection of side rails including telescopic section, if applicable	Locking devices	X*			
	Deformation	X*			
	Abrasions	X*			
Functional inspection of drives with hand control and nurse keypad/nurse hand control	Back section, upper leg section, lower leg section, height adjustment, Trendelenburg position, reverse Trendelenburg position, length adjustment (only for Vis-a-Vis-bed) - approach all end positions	X*/M*			
	Angle limitation (back section to upper leg section >90°)	X*			
	Adjustment lower leg section (rastomat/hydrolift/support plate)	X*			
	CPR function (if existing)	X*			
	Brake (electrical or mechanical) - brake applied - free running (only for hospital beds and S 280/S 310/S 380/S 282/S 382 (Vis-a-Vis)) - steering position	X*			
	Mechanical release (only for electrical brakes of hospital beds)	X*			
Functional inspection replacement	9 V battery (only for beds with Oki-/Ilcomat except S 960-1W/S 961) Replaced (yes/no)	A2*			
	Trapeze bar handle and belt (if existing) Replaced (yes/no)	A*			
Functional inspection miscellaneous	Bed extension (if existing)	B*			
	Bedding storage/bedding drawer (if existing)	B*			
Comment					
Legally relevant for Germany only	Leakage current by means of alternative measurement ≤ 500 µA, in accordance to DIN EN 62353	µA			
	Potential equalization impedance < 0.2 Ohm, in accordance to DIN EN 62353 (if existing)	Ω			
	Measuring instrument S/N				
Total result of the inspection:					
Signature of technician:		Next regular inspection:			

***A**:** To be replaced every 5 years for handles (H) and for H with roll function (RF) in nursing home mode, every 3 years for H with RF in hospital mode, every 2 years for H with RF for cleaning in automatic bed washing systems · **A2*:** To be replaced every two years · **B*:** Check for damage · **F*:** Check for deformation · **M*:** Check function of motors and end switches, does the motor switch off when reaching the end position? · **S*:** Check for correct fit · **X*:** General function control*

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0001f-EN-20120411

Info
You can find a printable version of this document on the Internet at www.voelker.de.

Spare part order

Völker GmbH
Service
Wullener Feld 79
58454 Witten/Germany

Tel.: +49 2302 96096-62
Fax: +49 2302 96096-66
E-Mail: service@voelker.de

Address: _____

_____

Name of the ordering party: _____

Street address: _____

Zip code/city/country: _____

Telephone number: _____

Customer number: _____

Customer order number: _____

Purchase order date: _____

Signature: _____
(Please, to fill in the form use block letters)

Stamp

Shipping address, if different from the billing address

Address: _____

_____

Attention of: _____

Street address: _____

Zip code/city/country: _____

Please fill out all the information carefully and complete the form in its entirety, otherwise we may have problems in delivering and processing this order.

MODEL (Bed-type)	SERIAL NO./ YEAR OF MANUFACTURE (Identifaction label inside of the bed-head)	SPARE PART DESCRIPTION	ITEM NUMBER	QUANTITY

Info
You can find a printable version of this document on the Internet at www.voelker.de.

Requirement for using the electronic service manual

In order to open the electronic version of these service manual (PDF file), you must have Adobe Reader 7.0.5 or later (or the corresponding Adobe Acrobat version) installed on your PC.

Adobe Reader is available for nearly all operating systems. The newest version can be obtained free of charge by download from *www.adobe.de/products/acrobat/readstep2.html* 🕮.

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Notes

Notes

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